UICI – 008 – 1

WDW-2 PERMITS, RENEWALS, & MODS (2)

2013

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division

DECEMBER 10, 2015

CERTIFIED MAIL
RETURN RECEIPT NO: 3771 5909

Scott M. Denton
Environmental Manager
The HollyFrontier Companies
P.O. Box 159
Artesia, NM 88211-0159

RE: **Modification of Underground Injection Control (UIC) Class I (non-hazardous) Disposal Well Discharge Permits (WDW-1: UICI-008-1; WDW-2: UICI-008-2; and WDW-3: UICI-008-3) to Require Annual Fall-Off Testing per EPA Regulation §40 CFR146.13(d)(1)**

Dear Mr. Denton:

The New Mexico Oil Conservation Division (OCD) in cooperation with the U.S. Environmental Protection Agency (EPA) Region 6 Office on Tuesday, October 6, 2015, determined that OCD shall increase the frequency of Fall-Off Testing (FOT) for all Underground Injection Control (UIC) Class I (non-hazardous) Injection Well Operators to at least annually per § 40CFR 146.13(d) (1) (see federal regulation below).

§ 146.13 Operating, monitoring and reporting requirements.
(d) *Ambient monitoring.* (1) *Based on a site-specific assessment of the potential for fluid movement from the well or injection zone and on the potential value of monitoring wells to detect such movement, the Director shall require the owner or operator to develop a monitoring program. At a minimum, the Director shall require monitoring of the pressure buildup in the injection zone annually, including at a minimum, a shut-down of the well for a time sufficient to conduct a valid observation of the pressure fall-off curve.*

Therefore, effective immediately, OCD revises Section 3.E. Fall-Off Test of the discharge permit issued to Navajo Refining Company, LLC on February 19, 2014, to require annual FOTs. FOTs shall be completed before September 30th of each year from now on. Well operators shall schedule FOTs with OCD at least 30 days prior to testing to allow OCD to witness key aspects of the FOT, i.e., bottom hole pressure gauge installation, and just prior to injection well pump shut-off and initiation of FOT monitoring.

If you have any questions, please contact Carl Chavez of my staff at (505) 476-3490, mail at the address below, or email at CarlJ.Chavez@state.nm.us. Thank you.

Sincerely,

Jim Griswold
Environmental Bureau Chief

JG/cjc

cc: OCD Artesia District Office

Lisa Pham, EPA Region 6

DISCHARGE PERMIT UICI-008-2 (WDW-2)

1. GENERAL PROVISIONS:

1.A. PERMITTEE AND PERMITTED FACILITY: The Director of the Oil Conservation Division (OCD) of the Energy, Minerals and Natural Resources Department issues Discharge Permit UICI-008-2 (Discharge Permit) to Navajo Refining Company (Permittee) to operate its Underground Injection Control (UIC) Class I non-hazardous waste injection well (Waste Disposal Well No. 2 - API No. 30-015-20894, WDW-2) located 1980 FNL and 660 FWL, Unit Letter E, Section 12, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico at its Disposal Well Facility (Facility). The Facility is located approximately 10.5 miles east-southeast of Artesia on Hwy-82 from Hwy-285 and about 3.3 miles south of Hilltop Road.

The Permittee is permitted to dispose of only non-hazardous (RCRA exempt and RCRA non-hazardous, non-exempt) oil field waste fluids into its Class I non-hazardous waste injection well (WDW-2). The Permittee may dispose of a maximum of 500 gallons per minute (gpm) of oil field waste fluids. Ground water that may be affected by a spill, leak, or accidental discharge occurs at a depth of approximately 50 - 100 feet below ground surface and has a total dissolved solids (TDS) concentration of approximately 1,000 – 2,200 mg/l.

1.B. SCOPE OF PERMIT: OCD has been granted the authority by statute and by delegation from the Water Quality Control Commission (WQCC) to administer the Water Quality Act (Chapter 74, Article 6 NMSA 1978) as it applies to Class I non-hazardous waste injection wells (see Section 74-6-4, 74-6-5 NMSA 1978).

The Water Quality Act and the rules promulgated pursuant to the Act protect ground water and surface water of the State of New Mexico by providing that, unless otherwise allowed by 20.6.2 NMAC, no person shall cause or allow effluent or leachate to discharge so that it may move directly or indirectly into ground water unless such discharge is pursuant to an approved discharge plan (see 20.6.2.3104 NMAC, 20.6.2.3106 NMAC, and 20.6.2.5000 through 20.6.2.5299 NMAC).

This Discharge Permit for a Class I non-hazardous waste injection well (WDW-2) is issued pursuant to the Water Quality Act and WQCC rules, 20.6.2 NMAC. This Discharge Permit does not authorize any treatment of, or on-site disposal of, any materials, product, by-product, or oil field waste, other than non-hazardous oil field waste fluids into its Class I non-hazardous waste injection well (WDW-2), including, but not limited to, the on-site disposal of lube oil, glycol, antifreeze, and washdown water. The Permittee may not dispose of any industrial waste fluid that is not oil field waste that is generated at its refinery. The Ground Water Quality Bureau of the New Mexico Environment Department permits the management of all industrial fluids that are not generated in the oil field.

Pursuant to 20.6.2.5004A NMAC, the following underground injection activities are prohibited:

1. The injection of fluids into a motor vehicle waste disposal well is prohibited.

2. The injection of fluids into a large capacity cesspool is prohibited.

3. The injection of any hazardous or radioactive waste into a well is prohibited except as provided by 20.6.2.5004A(3) NMAC.

4. Class IV wells are prohibited, except for wells re-injecting treated ground water into the same formation from which it was drawn as part of a removal or remedial action.

5. Barrier wells, drainage wells, recharge wells, return flow wells, and motor vehicle waste disposal wells are prohibited.

This Discharge Permit does not convey any property rights of any sort nor any exclusive privilege, and does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of state, federal, or local laws, rules or regulations.

The Permittee shall operate in accordance with the terms and conditions specified in this Discharge Permit to comply with the Water Quality Act and the rules issued pursuant to that Act, so that neither a hazard to public health nor undue risk to property will result (see 20.6.2.3109C NMAC); so that no discharge will cause or may cause any stream standard to be violated (see 20.6.2.3109H(2) NMAC); so that no discharge of any water contaminant will result in a hazard to public health (see 20.6.2.3109H(3) NMAC); so that the numerical standards specified in 20.6.2.3103 NMAC are not exceeded; and, so that the technical criteria and performance standards (see 20.6.2.5000 through 20.6.2.5299 NMAC) for Class I non-hazardous waste injection wells are met. Pursuant to 20.6.2.5003B NMAC, the Permittee shall comply with 20.6.2.1 through 20.6.2.5299 NMAC.

The Permittee shall not allow or cause water pollution, discharge, or release of any water contaminant that exceeds the Water Quality Control Commission (WQCC) standards specified in 20.6.2.3101 NMAC and 20.6.2.3103 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams). Pursuant to 20.6.2.5101A NMAC, the Permittee shall not inject non-hazardous waste fluids into ground water having 10,000 mg/l or less total dissolved solids (TDS).

The issuance of this permit does not relieve the Permittee from the responsibility of complying with the provisions of the Water Quality Act, any applicable regulations or water quality standards of the WQCC, or any applicable federal laws, regulations or standards (see Section 74-6-5 NMSA 1978).

1.C. DISCHARGE PERMIT RENEWAL: This Discharge Permit is a permit renewal that replaces the permit being renewed. Replacement of a prior permit does not relieve the Permittee of its responsibility to comply with the terms of that prior permit while that permit was in effect.

1.D. DEFINITIONS: Terms not specifically defined in this Discharge Permit shall have the same meanings as those in the Water Quality Act or the rules adopted pursuant to the Act, as the context requires.

1.E. FILING FEES AND PERMIT FEES: Pursuant to 20.6.2.3114 NMAC, every facility that submits a Discharge Permit application for initial approval or renewal shall pay the permit fees specified in Table 1 and the filing fee specified in Table 2 of 20.6.2.3114 NMAC. OCD has already received the required $100.00 filing fee. The Permittee shall submit the final $4,500.00 permit fee for a Class I non-hazardous waste injection well to OCD with a check made payable to "Water Quality Management Fund" thirty days after the date that this permit is issued.

1.F. EFFECTIVE DATE, EXPIRATION, RENEWAL CONDITIONS, AND PENALTIES FOR OPERATING WITHOUT A DISCHARGE PERMIT: This Discharge Permit becomes effective 30 days from the date that the Permittee receives this discharge permit or until the permit is terminated or expires. This Discharge Permit will expire on **June 1, 2017.** The Permittee shall submit an application for renewal no later than 120 days before that expiration date, pursuant to 20.6.2.5101F NMAC. If a Permittee submits a renewal application at least 120 days before the Discharge Permit expires and is in compliance with the approved Discharge Permit, then the existing Discharge Permit will not expire until OCD has approved or disapproved the renewal application. A discharge permit continued under this provision remains fully effective and enforceable. Operating with an expired Discharge Permit may subject the Permittee to civil and/or criminal penalties (see Section 74-6-10.1 NMSA 1978 and Section 74-6-10.2 NMSA 1978).

1.G. MODIFICATIONS AND TERMINATIONS: The Permittee shall notify the OCD Director and the OCD's Environmental Bureau of any Facility expansion, any injection increase above the approved pressure limit or volume limit specified in Permit Condition 3.B.2, or process modification that would result in any significant modification in the discharge of water contaminants (see 20.6.2.3107C NMAC). The OCD Director may require the Permittee to submit a Discharge Permit modification application pursuant to 20.6.2.3109E NMAC and may modify or terminate a Discharge Permit pursuant to Sections 74-6-5(M) through (N) NMSA 1978.

1. If data submitted pursuant to any monitoring requirements specified in this Discharge Permit or other information available to the OCD Director indicate that 20.6.2 NMAC is being or may be violated, then the OCD Director may require modification or, if it is determined by the OCD Director that the modification may not be adequate, may terminate this Discharge Permit for a Class I non-hazardous waste injection well (WDW-2) that was approved pursuant to the requirements of this 20.6.2.5000 through 20.6.2.5299 NMAC for the following causes:

a. Noncompliance by Permittee with any condition of this Discharge Permit; or,

b. The Permittee's failure in the discharge permit application or during the discharge permit review process to disclose fully all relevant facts, or Permittee's misrepresentation of any relevant facts at any time; or,

c. A determination that the permitted activity may cause a hazard to public health or undue risk to property and can only be regulated to acceptable levels by discharge

permit modification or termination (see Section 75-6-6 NMSA 1978; 20.6.2.5101I NMAC; and, 20.6.2.3109E NMAC).

2. This Discharge Permit may also be modified or terminated for any of the following causes:

a. Violation of any provisions of the Water Quality Act or any applicable regulations, standard of performance or water quality standards;

b. Violation of any applicable state or federal effluent regulations or limitations; or

c. Change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge (see Section 75-6-5M NMSA 1978).

1.H. TRANSFER OF CLASS I NON-HAZARDOUS WASTE INJECTION WELL (WDW-2) DISCHARGE PERMIT:

1. The transfer provisions of 20.6.2.3111 NMAC do not apply to a discharge permit for a Class I non-hazardous waste injection well.

2. Pursuant to 20.6.2.5101H NMAC, the Permittee may request to transfer its Class I non-hazardous waste injection well (WDW-2) discharge permit if:

a. The OCD Director receives written notice 30 days prior to the transfer date; and,

b. The OCD Director does not object prior to the proposed transfer date. OCD may require modifications to the discharge permit as a condition of transfer, and may require demonstration of adequate financial responsibility.

3. The written notice required in accordance with Permit Condition 1.H.2.a shall:

a. Have been signed by the Permittee and the succeeding Permittee, and shall include an acknowledgment that the succeeding Permittee shall be responsible for compliance with the Class I non-hazardous waste injection well discharge permit upon taking possession of the facility;

b. Set a specific date for transfer of the discharge permit responsibility, coverage and liability; and

c. Include information relating to the succeeding Permittee's financial responsibility required by 20.6.2.5210B(17) NMAC.

1.I. COMPLIANCE AND ENFORCEMENT: If the Permittee violates or is violating a condition of this Discharge Permit, OCD may issue a compliance order that requires compliance

immediately or within a specified time period, or assess a civil penalty, or both (see Section 74-6-10 NMSA 1978). The compliance order may also include a suspension or termination of this Discharge Permit. OCD may also commence a civil action in district court for appropriate relief, including injunctive relief (see Section 74-6-10A.2 NMSA 1978). The Permittee may be subject to criminal penalties for discharging a water contaminant without a discharge permit or in violation of a condition of a discharge permit; making any false material statement, representation, certification or omission of material fact in a renewal application, record, report, plan or other document filed, submitted or required to be maintained under the Water Quality Act; falsifying, tampering with or rendering inaccurate any monitoring device, method or record required to be maintained under the Water Quality Act; or failing to monitor, sample or report as required by a Discharge Permit issued pursuant to a state or federal law or regulation (see Section 74-6-10.2 NMSA 1978).

2. GENERAL FACILITY OPERATIONS:

2.A. QUARTERLY MONITORING REQUIREMENTS FOR CLASS I NON-HAZARDOUS WASTE INJECTION WELL (WDW-2): Pursuant to 20.6.2.5207B NMAC, the Permittee shall provide analysis of the injected fluids at least quarterly to yield data representative of their characteristics and to demonstrate pursuant to 20.6.2.5204A(3) NMAC that the injected fluids are not characteristically hazardous as determined by EPA SW-846 Method 1311 and the analytical methods specified in the Quarterly Monitoring List.

The Permittee shall analyze the injected fluids quarterly for the following characteristics:

- pH (Method 9040);
- Eh;
- Specific conductance;
- Specific gravity;
- Temperature;
- General ground water quality parameters (general chemistry/cations and anions, including: fluoride, calcium, potassium, magnesium, sodium bicarbonate, carbonate, chloride, sulfate, total dissolved solids, cation/anion balance, pH, and bromide using the methods specified in 40 CFR 136.3); and,
- EPA RCRA Characteristics for Ignitability (Methods 1010/1020 and ASTM standards), Corrosivity (Method 1110), and Reactivity (process knowledge);

The Permittee shall analyze the injected fluids quarterly for the constituents identified in the Quarterly Monitoring List (below) to demonstrate that the injected fluids do not exhibit the characteristic of toxicity using the Toxicity Characteristic Leaching Procedure, EPA SW-846 Test Method 1311 (see Table 1, 40 CFR 261.24(c)).:

QUARTERLY MONITORING LIST			
EPA HW No.	**Contaminant**	**SW-846 Methods**	**Regulatory Level (mg/L)**
D004	Arsenic	6010C	5.0
D005	Barium	6010C	100.0
D018	Benzene	8021B	0.5
D006	Cadmium	6020A	1.0
D019	Carbon tetrachloride	8021B 8260B	0.5
D021	Chlorobenzene	8021B 8260B	100.0
D022	Chloroform	8021B 8260B	6.0
D007	Chromium	6020A	5.0
D023	o-Cresol	8270D	200.0
D024	m-Cresol	8270D	200.0
D025	p-Cresol	8270D	200.0
D026	Cresol	8270D	200.0
D027	1,4-Dichlorobenzene	8021B 8121 8260B 8270D	7.5
D028	1,2-Dichloroethane	8021B 8260B	0.5
D029	1,1-Dichloroethylene	8021B 8260B	0.7
D030	2,4-Dinitrotoluene	8091 8270D	0.13
D032	Hexachlorobenzene	8121	0.13
D033	Hexachlorobutadiene	8021B 8121 8260B	0.5
D034	Hexachloroethane	8121	3.0
D008	Lead	6020A 7421	5.0
D009	Mercury	7470A 7471B	0.2
D035	Methyl ethyl ketone	8015B 8260B	200.0
D036	Nitrobenzene	8091 8270D	2.0
D037	Pentrachlorophenol	8041	100.0
D038	Pyridine	8260B 8270D	5.0
D010	Selenium	7741A	1.0

D011	Silver	6010C	5.0
D039	Tetrachloroethylene	8260B	0.7
D040	Trichloroethylene	8021B 8260B	0.5
D041	2,4,5-Trichlorophenol	8270D	400.0
D042	2,4,6-Trichlorophenol	8041A 8270D	2.0
D043	Vinyl chloride	8021B 8260B	0.2

If o-, m-, and p-cresol concentrations cannot be differentiated, then the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/L.
If the quantitation limit is greater than the regulatory level, then the quantitation limit becomes the regulatory level.

2.B. CONTINGENCY PLANS: The Permittee shall implement its proposed contingency plan(s) included in its Permit Renewal Application to cope with failure of a system(s) in the Discharge Permit.

2.C. CLOSURE: Prior to closure of the facility, the Permittee shall submit for OCD's approval, a closure plan including a completed form C-103 for plugging and abandonment of the Class I non-hazardous waste injection well (WDW-2). The Permittee shall plug and abandon its Class I non-hazardous waste injection well (WDW-2 pursuant to 20.6.2.5209 NMAC and as specified in Permit Condition 2.D.

1. Pre-Closure Notification: Pursuant to 20.6.2.5005A NMAC, the Permittee shall submit a pre-closure notification to OCD's Environmental Bureau at least 30 days prior to the date that it proposes to close or to discontinue operation of its Class I non-hazardous waste injection well (WDW-2). Pursuant to 20.6.2.5005B NMAC, OCD's Environmental Bureau must approve all proposed well closure activities before the Permittee may implement its proposed closure plan.

2. Required Information: The Permittee shall provide OCD's Environmental Bureau with the following information:

- Name of facility;
- Address of facility;
- Name of Permittee (and owner or operator, if appropriate);
- Address of Permittee (and owner or operator, if appropriate);
- Contact person;
- Phone number;
- Number and type of well(s);
- Year of well construction;
- Well construction details;
- Type of discharge;
- Average flow (gallons per day);

- Proposed well closure activities (*e.g.*, sample fluids/sediment, appropriate disposal of remaining fluids/sediments, remove well and any contaminated soil, clean out well, install permanent plug, conversion to other type of well, ground water and vadose zone investigation, *etc.*);
- Proposed date of well closure;
- Name of Preparer; and,
- Date.

2.D. PLUGGING AND ABANDONMENT PLAN: Pursuant to 20.6.2.5209A NMAC, when the Permittee proposes to plug and abandon its Class I non-hazardous waste injection well (WDW-2), it shall submit to OCD a plugging and abandonment plan that meets the requirements of 20.6.2.3109C NMAC, 20.6.2.5101C NMAC, and 20.6.2.5005 NMAC for protection of ground water. If requested by OCD, Permittee shall submit for approval prior to closure, a revised or updated plugging and abandonment plan. The obligation to implement the plugging and abandonment plan as well as the requirements of the plan survives the termination or expiration of this Discharge Permit. The Permittee shall comply with 20.6.2.5209 NMAC.

2.E. RECORD KEEPING: The Permittee shall maintain records of all inspections required by this Discharge Permit at its Facility office for a minimum of five years and shall make those records available for inspection by OCD.

2.F. RELEASE REPORTING: The Permittee shall comply with the following permit conditions, pursuant to 20.6.2.1203 NMAC, if it determines that a release of oil or other water contaminant, in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property, has occurred. The Permittee shall report unauthorized releases of water contaminants in accordance with any additional commitments made in its approved Contingency Plan. If the Permittee determines that any constituent exceeds the standards specified in 20.6.2.3103 NMAC, then it shall report a release to OCD's Environmental Bureau.

1. Oral Notification: As soon as possible after learning of such a discharge, but in no event more than twenty-four (24) hours thereafter, the Permittee shall notify OCD's Environmental Bureau. The Permittee shall provide the following:

- The name, address, and telephone number of the person or persons in charge of the facility, as well as of the owner and/or operator of the facility;
- The name and location of the facility;
- The date, time, location, and duration of the discharge;
- The source and cause of discharge;
- A description of the discharge, including its chemical composition;
- The estimated volume of the discharge; and,
- Any corrective or abatement actions taken to mitigate immediate damage from the discharge.

2. Written Notification: Within one week after the Permittee has discovered a discharge, the Permittee shall send written notification (may use form C-141 with attachments) to OCD's Environmental Bureau verifying the prior oral notification as to each of the foregoing items and providing any appropriate additions or corrections to the information contained in the prior oral notification.

The Permittee shall provide subsequent written reports as required by OCD's Environmental Bureau.

2.G. OTHER REQUIREMENTS:

1. Inspection and Entry: Pursuant to Section 74-6-9 NMSA 1978 and 20.6.2.3107A NMAC, the Permittee shall allow any authorized representative of the OCD Director, to:

- Upon the presentation of proper credentials, enter the premises at reasonable times;
- Inspect and copy records required by this Discharge Permit;
- Inspect any treatment works, monitoring, and analytical equipment;
- Sample any effluent before or after discharge; and,
- Use the Permittee's monitoring systems and wells in order to collect samples.

2. Advance Notice: The Permittee shall provide OCD's Environmental Bureau and Artesia District Office with at least five (5) working days advance notice of any environmental sampling to be performed pursuant to this Discharge Permit, or any well plugging, abandonment or decommissioning of any equipment associated with its Class I non-hazardous waste injection well (WDW-2).

3. Environmental Monitoring: The Permittee shall ensure that any environmental sampling and analytical laboratory data collected meets the standards specified in 20.6.2.3107B NMAC. The Permittee shall ensure that all environmental samples are analyzed by an accredited "National Environmental Laboratory Accreditation Conference" (NELAC) Laboratory. The Permittee shall submit data summary tables, all raw analytical data, and laboratory Quality Assurance/Quality Control (QA/QC).

2.H. BONDING OR FINANCIAL ASSURANCE: Pursuant to 20.6.2.5210B(17) NMAC, the Permittee shall maintain at a minimum, a single well plugging bond in the amount that it shall determine, in accordance with Permit Condition 5.B, to cover potential costs associated with plugging and abandonment of the Class I non-hazardous waste injection well (WDW-2), surface restoration, and post-operational monitoring, as may be needed. OCD may require additional financial assurance to ensure adequate funding is available to plug and abandon the well and/or for any required corrective actions.

Methods by which the Permittee shall demonstrate the ability to undertake these measures shall include submission of a surety bond or other adequate assurances, such as financial statements or other materials acceptable to the OCD Director, such as: (1) a surety bond; (2) a trust fund with a New Mexico bank in the name of the State of New Mexico, with the State as Beneficiary; (3) a

non-renewable letter of credit made out to the State of New Mexico; (4) liability insurance specifically covering the contingencies listed in this paragraph; or (5) a performance bond, generally in conjunction with another type of financial assurance. If an adequate bond is posted by the Permittee to a federal or another state agency, and this bond covers all of the measures specified above, the OCD Director shall consider this bond as satisfying the bonding requirements of Sections 20.6.2.5000 through 20.6.2.5299 NMAC wholly or in part, depending upon the extent to which such bond is adequate to ensure that the Permittee will fully perform the measures required herein above.

2.I. REPORTING:

1. Quarterly Reports: The Permittee shall submit quarterly reports pursuant to 20.6.2.5208A NMAC to OCD's Environmental Bureau no later than 45 days following the end of each calendar quarter. The quarterly reports shall include the following:

a. The physical, chemical and other relevant characteristics of injection fluids;

b. Monthly average, maximum and minimum values for injection pressure, flow rate and volume, and annular pressure; and

c. The results of monitoring prescribed under Section 20.6.2.5207B NMAC.

d. Weekly expansion tank volume fluid readings and the fluid volume additions or removals from the expansion tank.

2. Annual Report: The Permittee shall submit its annual report pursuant to 20.6.2.3107 NMAC to OCD's Environmental Bureau by **June 1**st of the following year. The annual report shall include the following:

- Cover sheet marked as "Annual Class I Non-Hazardous Waste Injection Well (WDW-2), Name of Permittee, Discharge Permit Number, API number of well, date of report, and person submitting report;
- Summary of Class I non-hazardous waste injection well (WDW-2) operations for the year including a description and reason for any remedial or major work on the well with a copy of form C-103(s);
- Monthly injection/disposal volume, including the cumulative total should be carried over to each year;
- Maximum and average injection pressures;
- A copy of the quarterly chemical analyses shall be included with data summary and all QA/QC information;
- Copy of any mechanical integrity test chart(s), including the type of test, *i.e.,* duration, gauge pressure, *etc.;*
- Copy of fall-of test charts;
- Summary tables listing environmental analytical laboratory data for quarterly waste fluid samples. Any 20.6.2.3103 NMAC constituent(s) found to exceed a water

quality standard shall be highlighted and noted in the annual report. The Permittee shall include copies of the most recent year's environmental analytical laboratory data sheets with QA/QC summary sheet information in conformance with the National Environmental Laboratory Accreditation Conference (NELAC) and EPA Standards;

- Brief explanation describing deviations from the normal injection operations;
- Results of any leaks and spill reports (include any C-141 reports);
- An Area of Review (AOR) annual update summary;
- A summary with interpretation of MITs, Fall-Off Tests, *etc.*, with conclusion(s) and recommendation(s);
- Records of the expansion tank monitoring pressure, fluid removals and/or additions indicating the well MIT condition;
- A summary of all major Facility activities or events, which occurred during the year with any conclusions and recommendations;
- A summary of any new discoveries of ground water contamination with all leaks, spills and releases and corrective actions taken; and,
- The Permittee shall file its Annual Report in an electronic format with a hard copy submittal to OCD's Environmental Bureau.

3. CLASS I NON-HAZARDOUS WASTE INJECTION WELL (WDW-2) OPERATIONS:

3.A. OPERATING REQUIREMENTS: The Permittee shall comply with the operating requirements specified in 20.6.2.5206A NMAC and 20.6.2.5206B NMAC to ensure that:

1. The maximum injection pressure at the wellhead shall not initiate new fractures or propagate existing fractures in the confining zone, or cause the movement of injection or formation fluids into ground water having 10,000 mg/l or less TDS except for fluid movement approved pursuant to 20.6.2.5103 NMAC and during well stimulation.

2. Injection between the outermost casing and the well bore is prohibited in a zone other than the authorized injection zone. If the Permittee determines that its Class I non-hazardous waste injection well (WDW-2) is discharging or suspects that it is discharging fluids into a zone or zones other than the permitted injection zone specified in Permit Condition 3.B.1., then the Permittee shall cease operations until proper repairs are made, notify the OCD's Environmental Bureau and Artesia District office within 24 hours, and shall not resume injection until the permittee has received approval from the OCD.

3. The annulus between the tubing, packer, and the intermediate casing shall be filled with a fluid approved by the OCD Director and a pressure, also approved by the OCD Director shall be maintained on the annulus.

3.B. INJECTION OPERATIONS:

1. Injection Formation, Interval, and Waste Fluids: The Permittee shall inject only non-hazardous (RCRA exempt and RCRA non-hazardous, non-exempt) oil field waste fluid into the Lower Wolfcamp, Cisco, and Canyon Formations from 7,570 feet to 8,399 feet in

its Class I non-hazardous waste injection well (WDW-2). The surface casing is set at 1,995 feet; the intermediate casing or production casing is set at 8,869 feet; the injection tubing is set at approximately 7,528 feet; and the packer is set at approximately 7,528 feet. A cement plug is set at 8,770 feet and bottom cement plug is set from 9,675 – 9,775 feet. The top cement plug is set in the intermediate casing and confines the Class I non-hazardous injection well (WDW-2) to the injection interval. The bottom cement plug is set within the open borehole and serves as a second barrier to flow with well TD at 10,372 feet. The Permittee shall ensure that the injected waste fluid enters perforations only within the above specified injection interval and is not permitted to escape to other formations or onto the surface.

2. Well Injection Pressure Limits and Injection Flow Rate: The Permittee shall ensure that the maximum wellhead or surface injection pressure on its Class I non-hazardous waste injection well (WDW-2) shall not exceed 1,510 psig and that the injection flow rate shall not exceed 500 gpm.

3. Pressure Limiting Device: The Permittee shall equip and operate its Class I non-hazardous waste injection well (WDW-2) or system with a pressure limiting device, or equivalent (*i.e.*, Murphy switch), in working condition which shall at all times limit surface injection pressure to the maximum allowable pressure for its Class I non-hazardous waste injection well (WDW-2).

The Permittee shall inspect and monitor the pressure-limiting device daily and shall report any pressure exceedances within 24 hours of detection to OCD's Environmental Bureau and Artesia District Office. The Permittee shall take all steps necessary to ensure that the injected waste fluids enter only the proposed injection interval and are not permitted to escape to other formations or onto the ground surface. The Permittee shall report to OCD's Environmental Bureau within 24 hours of discovery any indication that new fractures or existing fractures have been propagated, or that damage to the well, the injection zone, or formation has occurred.

OCD may authorize an increase in surface injection pressure if the Permittee performs a valid Step-Rate Test (SRT), which demonstrates that the proposed maximum surface injection pressure is less than the injection zone fracture pressure with an acceptable safety factor. If approvable, the Permittee must apply for a modification to this Discharge Permit pursuant to 20.6.2.3109 NMAC.

3.C. CONTINUOUS MONITORING DEVICES: The Permittee shall use continuous monitoring devices to provide a record of injection pressure, flow rate, flow volume, and pressure on the annulus between the tubing and the protection casing.

3.D. MECHANICAL INTEGRITY FOR CLASS I NON-HAZARDOUS WASTE INJECTION WELLS:

1. Pursuant to 20.6.2.5204 NMAC, the Permittee shall conduct a mechanical integrity test (MIT) for its Class I non-hazardous waste injection well (WDW-2) at least once every five years or more frequently as the OCD Director may require for good cause during the

life of the well. The Permittee shall also demonstrate mechanical integrity for its Class I non-hazardous waste injection well (WDW-2) by running a MIT every time it performs a well workover, including when it pulls the tubing or reseats the packer. The Permittee shall request MIT approval using form C-103 (Sundry Notices and Reports on Wells) with copies sent to OCD's Environmental Bureau and Artesia District Office. The Permittee shall notify OCD's Environmental Bureau 5 days prior to conducting any MIT to allow OCD the opportunity to witness the MIT.

The Permittee shall conduct a casing-tubing annulus MIT from the surface to the approved injection depth to assess casing and tubing integrity. The MIT shall consist of a 30-minute test at a minimum pressure of 300 psig measured at the surface. The Permittee shall follow OCD's 2004 *New Mexico Oil Conservation Division Underground Injection Control Program Manual* guidance when conducting a MIT. The Permittee shall submit the results of its MIT to OCD's Environmental Bureau and Artesia District Office within 30 days of completion. If any remedial work or any other workover operations are necessary, the Permittee shall comply with Permit Condition 3.F.

2. A Class I non-hazardous waste injection well has mechanical integrity if there is no detectable leak in the intermediate casing, tubing and/or packer which OCD considers to be significant at maximum operating temperature and pressure, and no detectable conduit for fluid movement out of the injection zone through the well bore, or vertical channels adjacent to the well bore which the OCD considers to be significant. The following criteria will determine if the Class I non-hazardous waste injection well (WDW-2) has passed the MIT:

a. The MIT passes if there is zero bleed-off during the test;

b. The MIT passes if there is a less than a ± 10% change in the final test pressure compared to the starting pressure, if approved by OCD;

c. The MIT fails if there is more than 10% reduction in the final test pressure compared to the starting pressure or that the pressure does not stabilize within 10% of the starting pressure before the end of the MIT. The Permittee shall shut-in the well and investigate for leaks in accordance with Permit Condition 3.F. The Permittee shall not resume injection operations until approved by OCD.

d. When the MIT is not witnessed by OCD and fails, the Permittee shall shut-in the well and notify OCD within 24 hours of the failure of the MIT.

3. Pursuant to 20.6.2.5204C NMAC, the OCD Director may consider the use of equivalent alternative test methods to determine mechanical integrity. The Permittee shall submit information on the proposed test and all technical data supporting its use. The OCD Director may approve the Permittee's request if it will reliably demonstrate the mechanical integrity of the well for which its use is proposed.

4. Pursuant to 20.6.2.5204D NMAC, when conducting and evaluating the MIT(s), the Permittee shall apply methods and standards generally accepted in the oil and gas industry.

When the Permittee reports the results of all MIT(s) to the OCD Director, it shall include a description of the test(s), the method(s) used, and the test results.

5. The Permittee shall conduct a Bradenhead test at least annually and each time that it conducts an MIT.

3.E. FALL-OFF TEST: The Permittee shall conduct a Fall-Off Test (FOT) to monitor the injection zone formation characteristics and pressure buildup over time in the injection zone at least every three years. The Permittee shall request FOT approval using form C-103 (Sundry Notices and Reports on Wells) sent to OCD's Environmental Bureau and Artesia District Office.

The Permittee shall follow OCD's 2007 *New Mexico Oil Conservation Division UIC Class I Well Fall-Off Test Guidance* or other OCD-approved FOT when conducting a FOT and shall shut down the well for a time sufficient to conduct a valid observation of the pressure fall-off curve. The Permittee shall submit the results of its FOT to OCD's Environmental Bureau and Artesia District Office within 30 days of completion, including color copies of the original charts.

3.F. WELL WORKOVER OPERATIONS: Pursuant to 20.6.2.5205A(5) NMAC, the Permittee shall provide notice to and shall obtain approval from OCD's Environmental Bureau prior to commencement of any remedial work or any other workover operations to allow OCD the opportunity to witness the operation. The Permittee shall request approval using form C-103 (Sundry Notices and Reports on Wells) with copies sent to OCD's Environmental Bureau and Artesia District Office. After completing remedial work, pressure tests, or any other workover operations, the Permittee shall run a MIT in accordance with Permit Condition 3.D to verify that the remedial work has successfully repaired any problems.

3. G. EXTERNAL EXPANSION TANK: The Permittee shall equip its Class I non-hazardous waste injection well (WDW-2) with an external expansion tank system under constant 100 psig pressure connected to the tubing, packer and intermediate casing-annulus. The Permittee shall fill the external expansion tank half-full with an OCD-approved liquid to establish an equilibrium volume and liquid level. The Permittee shall monitor the liquid levels in the external expansion tank at least weekly and shall record all additions or removals of liquids into or out of the external expansion tank. The Permittee shall record any loss or gain of fluids in the external expansion tank, and shall verbally notify OCD's Environmental Bureau within 5 days of any loss or gain of fluid greater than 5 barrels per month and shall comply with Permit Condition 3.F.

The Permittee shall provide the weekly expansion tank volume fluid volumes readings and the fluid volume additions or removals from the expansion tank on a quarterly basis and in the annual report.

3.H. INJECTION RECORD VOLUMES AND PRESSURES: The Permittee shall submit quarterly reports of its injection operations and well workovers. The Permittee shall record the minimum, maximum, and average flow waste injection volumes (including total volumes) and annular pressures of the injected waste fluids on a monthly basis, and shall submit the data to

OCD on a quarterly basis and in the annual report. The Permittee shall fill the casing-tubing annulus with an OCD-approved liquid and install a Murphy pressure switch or equivalent, as described in the Permittee's permit renewal application, in order to detect leakage in the casing, tubing, or packer.

3.I. AREA OF REVIEW (AOR): The Permittee shall orally report to OCD's Environmental Bureau within 72 hours of discovery of any new wells, conduits, or any other device that penetrates or may penetrate the injection zone within a 1-mile radius from its Class I non-hazardous waste injection well (WDW-2).

4. CLASS V WELLS: Pursuant to 20.6.2.5002B NMAC, leach fields and other waste fluids disposal systems that inject non-hazardous fluid into or above an underground source of drinking water are UIC Class V injection wells. This Discharge Permit does not authorize the use of a Class V injection well for the disposal of industrial waste. Pursuant to 20.6.2.5005 NMAC, the Permittee shall close any Class V industrial waste injection well that injects non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes (*e.g.*, septic systems, leach fields, dry wells, *etc*.) within 90 calendar days of the issuance of this Discharge Permit. The Permittee shall document the closure of any Class V wells used for the disposal of non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes other than contaminated ground water in its Annual Report. Other Class V wells, including wells used only for the injection of domestic wastes, shall be permitted by the New Mexico Environment Department.

5. SCHEDULE OF COMPLIANCE:

5.A. QUARTERLY AND ANNUAL REPORTS: The Permittee shall submit its quarterly and annual reports to OCD as specified in Permit Condition 2.I.

5.B. BONDING OR FINANCIAL ASSURANCE: The Permittee shall submit an estimate of the minimum cost to properly close, plug and abandon its Class I non-hazardous waste injection well (WDW-2), conduct ground water restoration if applicable, and any post-operational monitoring as may be needed (see 20.6.2.5210B(17) NMAC) within 90 days of permit issuance (see 20.6.2.5210B(17) NMAC). The Permittee's cost estimate shall be based on third person estimates. After review, OCD will require the Permittee to submit a single well plugging bond based on the third person cost estimate.

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey, Division Director
Oil Conservation Division

FEBRUARY 19, 2014

CERTIFIED MAIL
RETURN RECEIPT NO: 0919 5938

Mr. Mike Holder
Environmental Manager
Navajo Refining Company, L.L.C.
501 E Main Street
Artesia, NM 88210

RE: OCD RESPONSE TO COMMENTS ON DRAFT DISCHARGE PERMITS AND APPROVAL OF FINAL DISCHARGE PERMITS FOR THE THREE NAVAJO ARTESIA REFINERY UIC CLASS 1 INJECTION WELLS UICI-008-1 (WDW-1), UNIT LETTER O, SECTION 31, TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM, EDDY COUNTY, NEW MEXICO UICI-008-2 (WDW-2), UNIT LETTER E, SECTION 12, TOWNSHIP 18 SOUTH, RANGE 27 EAST, NMPM, EDDY COUNTY, NEW MEXICO AND UICI-008-3 (WDW-3), UNIT LETTER N, SECTION 1, TOWNSHIP 18 SOUTH, RANGE 27 EAST, NMPM, EDDY COUNTY, NEW MEXICO

Dear Mr. Holder:

The Oil Conservation Division (OCD) has reviewed Navajo's comments of January 2, 2014 on its draft revised discharge permits of December 26, 2013. OCD evaluated Navajo's comments and accepted most of them.

The Discharge Permit renewals for the three Navajo Refining Company, LLC UIC Non-Hazardous Injection Wells specified above are **hereby approved** under the terms and conditions specified in the enclosed Discharge Permits.

Navajo's original discharge permits were issued in 1998 through 2008 and have been subsequently renewed. Navajo's discharge permit renewal applications were submitted pursuant to 20.6.2.3106 NMAC. OCD approves these discharge permit renewals pursuant to 20.6.2.3109A NMAC. Please note 20.6.2.3109G NMAC, which provides for possible future amendment of the permit. Please be advised that approval of this discharge permit does not relieve Navajo of liability of operations result in pollution of surface water, ground water, or the environment.

Please note that 20.6.2.3104 NMAC specifies "*When a permit has been issued, discharges must be consistent with the terms and conditions of the permit.*" Pursuant to 20.6.2.3107C NMAC, Navajo is required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the water quality or volume of the discharge.

All three discharge permits will expire on **June 1, 2017**, and Navajo should submit discharge permit renewal applications in ample time before this date. Note that under 20.6.2.3106F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved discharge permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved.

The discharge permit renewal applications for the Navajo Artesia Refinery are subject to 20.6.2.3114 NMAC. Every billable facility submitting a discharge permit renewal application is assessed a non-refundable filing fee of $100.00. OCD has already received filing fees for the two renewals. OCD revised WDW-3, which was renewed in 2012, by adding additional quarterly monitoring constituents so that Navajo could demonstrate that it does not inject characteristic hazardous waste. The permit fee for UIC Class I non-hazardous waste injection wells is $4,500.00 per well. The Permittee shall submit $9,000.00 amount within 30 days of its receipt of the discharge permits. Checks must be payable to the **"New Mexico Water Quality Management Fund"**, and **not** the Oil Conservation Division.

Please make all checks payable to:

WATER QUALITY MANAGEMENT FUND
C/O: OIL CONSERVATION DIVISION
1220 NORTH ST. FRANCIS DRIVE
SANTA FE, NEW MEXICO 87505

If you have any questions regarding this matter, please contact Glenn von Gonten at 505-476-3488. On behalf of the staff of OCD, I wish to thank you and your staff for your cooperation during this discharge permit renewal process.

Thank you for your cooperation.

Jami Bailey
Director

JB/gvg

DISCHARGE PERMIT UICI-008-2 (WDW-2)

1. GENERAL PROVISIONS:

1.A. PERMITTEE AND PERMITTED FACILITY: The Director of the Oil Conservation Division (OCD) of the Energy, Minerals and Natural Resources Department issues Discharge Permit UICI-008-2 (Discharge Permit) to Navajo Refining Company (Permittee) to operate its Underground Injection Control (UIC) Class I non-hazardous waste injection well (Waste Disposal Well No. 2 - API No. 30-015-20894, WDW-2) located 1980 FNL and 660 FWL, Unit Letter E, Section 12, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico at its Disposal Well Facility (Facility). The Facility is located approximately 10.5 miles east-southeast of Artesia on Hwy-82 from Hwy-285 and about 3.3 miles south of Hilltop Road.

The Permittee is permitted to dispose of only non-hazardous (RCRA exempt and RCRA non-hazardous, non-exempt) oil field waste fluids into its Class I non-hazardous waste injection well (WDW-2). The Permittee may dispose of a maximum of 500 gallons per minute (gpm) of oil field waste fluids. Ground water that may be affected by a spill, leak, or accidental discharge occurs at a depth of approximately 50 - 100 feet below ground surface and has a total dissolved solids (TDS) concentration of approximately 1,000 – 2,200 mg/l.

1.B. SCOPE OF PERMIT: OCD has been granted the authority by statute and by delegation from the Water Quality Control Commission (WQCC) to administer the Water Quality Act (Chapter 74, Article 6 NMSA 1978) as it applies to Class I non-hazardous waste injection wells (see Section 74-6-4, 74-6-5 NMSA 1978).

The Water Quality Act and the rules promulgated pursuant to the Act protect ground water and surface water of the State of New Mexico by providing that, unless otherwise allowed by 20.6.2 NMAC, no person shall cause or allow effluent or leachate to discharge so that it may move directly or indirectly into ground water unless such discharge is pursuant to an approved discharge plan (see 20.6.2.3104 NMAC, 20.6.2.3106 NMAC, and 20.6.2.5000 through 20.6.2.5299 NMAC).

This Discharge Permit for a Class I non-hazardous waste injection well (WDW-2) is issued pursuant to the Water Quality Act and WQCC rules, 20.6.2 NMAC. This Discharge Permit does not authorize any treatment of, or on-site disposal of, any materials, product, by-product, or oil field waste, other than non-hazardous oil field waste fluids into its Class I non-hazardous waste injection well (WDW-2), including, but not limited to, the on-site disposal of lube oil, glycol, antifreeze, and washdown water. The Permittee may not dispose of any industrial waste fluid that is not oil field waste that is generated at its refinery. The Ground Water Quality Bureau of the New Mexico Environment Department permits the management of all industrial fluids that are not generated in the oil field.

Pursuant to 20.6.2.5004A NMAC, the following underground injection activities are prohibited:

1. The injection of fluids into a motor vehicle waste disposal well is prohibited.

2. The injection of fluids into a large capacity cesspool is prohibited.

3. The injection of any hazardous or radioactive waste into a well is prohibited except as provided by 20.6.2.5004A(3) NMAC.

4. Class IV wells are prohibited, except for wells re-injecting treated ground water into the same formation from which it was drawn as part of a removal or remedial action.

5. Barrier wells, drainage wells, recharge wells, return flow wells, and motor vehicle waste disposal wells are prohibited.

This Discharge Permit does not convey any property rights of any sort nor any exclusive privilege, and does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of state, federal, or local laws, rules or regulations.

The Permittee shall operate in accordance with the terms and conditions specified in this Discharge Permit to comply with the Water Quality Act and the rules issued pursuant to that Act, so that neither a hazard to public health nor undue risk to property will result (see 20.6.2.3109C NMAC); so that no discharge will cause or may cause any stream standard to be violated (see 20.6.2.3109H(2) NMAC); so that no discharge of any water contaminant will result in a hazard to public health (see 20.6.2.3109H(3) NMAC); so that the numerical standards specified in 20.6.2.3103 NMAC are not exceeded; and, so that the technical criteria and performance standards (see 20.6.2.5000 through 20.6.2.5299 NMAC) for Class I non-hazardous waste injection wells are met. Pursuant to 20.6.2.5003B NMAC, the Permittee shall comply with 20.6.2.1 through 20.6.2.5299 NMAC.

The Permittee shall not allow or cause water pollution, discharge, or release of any water contaminant that exceeds the Water Quality Control Commission (WQCC) standards specified in 20.6.2.3101 NMAC and 20.6.2.3103 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams). Pursuant to 20.6.2.5101A NMAC, the Permittee shall not inject non-hazardous waste fluids into ground water having 10,000 mg/l or less total dissolved solids (TDS).

The issuance of this permit does not relieve the Permittee from the responsibility of complying with the provisions of the Water Quality Act, any applicable regulations or water quality standards of the WQCC, or any applicable federal laws, regulations or standards (see Section 74-6-5 NMSA 1978).

1.C. DISCHARGE PERMIT RENEWAL: This Discharge Permit is a permit renewal that replaces the permit being renewed. Replacement of a prior permit does not relieve the Permittee of its responsibility to comply with the terms of that prior permit while that permit was in effect.

1.D. DEFINITIONS: Terms not specifically defined in this Discharge Permit shall have the same meanings as those in the Water Quality Act or the rules adopted pursuant to the Act, as the context requires.

1.E. FILING FEES AND PERMIT FEES: Pursuant to 20.6.2.3114 NMAC, every facility that submits a Discharge Permit application for initial approval or renewal shall pay the permit fees specified in Table 1 and the filing fee specified in Table 2 of 20.6.2.3114 NMAC. OCD has already received the required $100.00 filing fee. The Permittee shall submit the final $4,500.00 permit fee for a Class I non-hazardous waste injection well to OCD with a check made payable to "Water Quality Management Fund" thirty days after the date that this permit is issued.

1.F. EFFECTIVE DATE, EXPIRATION, RENEWAL CONDITIONS, AND PENALTIES FOR OPERATING WITHOUT A DISCHARGE PERMIT: This Discharge Permit becomes effective 30 days from the date that the Permittee receives this discharge permit or until the permit is terminated or expires. This Discharge Permit will expire on **June 1, 2017.** The Permittee shall submit an application for renewal no later than 120 days before that expiration date, pursuant to 20.6.2.5101F NMAC. If a Permittee submits a renewal application at least 120 days before the Discharge Permit expires and is in compliance with the approved Discharge Permit, then the existing Discharge Permit will not expire until OCD has approved or disapproved the renewal application. A discharge permit continued under this provision remains fully effective and enforceable. Operating with an expired Discharge Permit may subject the Permittee to civil and/or criminal penalties (see Section 74-6-10.1 NMSA 1978 and Section 74-6-10.2 NMSA 1978).

1.G. MODIFICATIONS AND TERMINATIONS: The Permittee shall notify the OCD Director and the OCD's Environmental Bureau of any Facility expansion, any injection increase above the approved pressure limit or volume limit specified in Permit Condition 3.B.2, or process modification that would result in any significant modification in the discharge of water contaminants (see 20.6.2.3107C NMAC). The OCD Director may require the Permittee to submit a Discharge Permit modification application pursuant to 20.6.2.3109E NMAC and may modify or terminate a Discharge Permit pursuant to Sections 74-6-5(M) through (N) NMSA 1978.

1. If data submitted pursuant to any monitoring requirements specified in this Discharge Permit or other information available to the OCD Director indicate that 20.6.2 NMAC is being or may be violated, then the OCD Director may require modification or, if it is determined by the OCD Director that the modification may not be adequate, may terminate this Discharge Permit for a Class I non-hazardous waste injection well (WDW-2) that was approved pursuant to the requirements of this 20.6.2.5000 through 20.6.2.5299 NMAC for the following causes:

a. Noncompliance by Permittee with any condition of this Discharge Permit; or,

b. The Permittee's failure in the discharge permit application or during the discharge permit review process to disclose fully all relevant facts, or Permittee's misrepresentation of any relevant facts at any time; or,

c. A determination that the permitted activity may cause a hazard to public health or undue risk to property and can only be regulated to acceptable levels by discharge

permit modification or termination (see Section 75-6-6 NMSA 1978; 20.6.2.5101I NMAC; and, 20.6.2.3109E NMAC).

2. This Discharge Permit may also be modified or terminated for any of the following causes:

a. Violation of any provisions of the Water Quality Act or any applicable regulations, standard of performance or water quality standards;

b. Violation of any applicable state or federal effluent regulations or limitations; or

c. Change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge (see Section 75-6-5M NMSA 1978).

1.H. TRANSFER OF CLASS I NON-HAZARDOUS WASTE INJECTION WELL (WDW-2) DISCHARGE PERMIT:

1. The transfer provisions of 20.6.2.3111 NMAC do not apply to a discharge permit for a Class I non-hazardous waste injection well.

2. Pursuant to 20.6.2.5101H NMAC, the Permittee may request to transfer its Class I non-hazardous waste injection well (WDW-2) discharge permit if:

a. The OCD Director receives written notice 30 days prior to the transfer date; and,

b. The OCD Director does not object prior to the proposed transfer date. OCD may require modifications to the discharge permit as a condition of transfer, and may require demonstration of adequate financial responsibility.

3. The written notice required in accordance with Permit Condition 1.H.2.a shall:

a. Have been signed by the Permittee and the succeeding Permittee, and shall include an acknowledgment that the succeeding Permittee shall be responsible for compliance with the Class I non-hazardous waste injection well discharge permit upon taking possession of the facility;

b. Set a specific date for transfer of the discharge permit responsibility, coverage and liability; and

c. Include information relating to the succeeding Permittee's financial responsibility required by 20.6.2.5210B(17) NMAC.

1.I. COMPLIANCE AND ENFORCEMENT: If the Permittee violates or is violating a condition of this Discharge Permit, OCD may issue a compliance order that requires compliance

immediately or within a specified time period, or assess a civil penalty, or both (see Section 74-6-10 NMSA 1978). The compliance order may also include a suspension or termination of this Discharge Permit. OCD may also commence a civil action in district court for appropriate relief, including injunctive relief (see Section 74-6-10A.2 NMSA 1978). The Permittee may be subject to criminal penalties for discharging a water contaminant without a discharge permit or in violation of a condition of a discharge permit; making any false material statement, representation, certification or omission of material fact in a renewal application, record, report, plan or other document filed, submitted or required to be maintained under the Water Quality Act; falsifying, tampering with or rendering inaccurate any monitoring device, method or record required to be maintained under the Water Quality Act; or failing to monitor, sample or report as required by a Discharge Permit issued pursuant to a state or federal law or regulation (see Section 74-6-10.2 NMSA 1978).

2. GENERAL FACILITY OPERATIONS:

2.A. QUARTERLY MONITORING REQUIREMENTS FOR CLASS I NON-HAZARDOUS WASTE INJECTION WELL (WDW-2): Pursuant to 20.6.2.5207B NMAC, the Permittee shall provide analysis of the injected fluids at least quarterly to yield data representative of their characteristics and to demonstrate pursuant to 20.6.2.5204A(3) NMAC that the injected fluids are not characteristically hazardous as determined by EPA SW-846 Method 1311 and the analytical methods specified in the Quarterly Monitoring List.

The Permittee shall analyze the injected fluids quarterly for the following characteristics:

- pH (Method 9040);
- Eh;
- Specific conductance;
- Specific gravity;
- Temperature;
- General ground water quality parameters (general chemistry/cations and anions, including: fluoride, calcium, potassium, magnesium, sodium bicarbonate, carbonate, chloride, sulfate, total dissolved solids, cation/anion balance, pH, and bromide using the methods specified in 40 CFR 136.3); and,
- EPA RCRA Characteristics for Ignitability (Methods 1010/1020 and ASTM standards), Corrosivity (Method 1110), and Reactivity (process knowledge);

The Permittee shall analyze the injected fluids quarterly for the constituents identified in the Quarterly Monitoring List (below) to demonstrate that the injected fluids do not exhibit the characteristic of toxicity using the Toxicity Characteristic Leaching Procedure, EPA SW-846 Test Method 1311 (see Table 1, 40 CFR 261.24(c)).:

QUARTERLY MONITORING LIST			
EPA HW No.	**Contaminant**	**SW-846 Methods**	**Regulatory Level (mg/L)**
D004	Arsenic	6010C	5.0
D005	Barium	6010C	100.0
D018	Benzene	8021B	0.5
D006	Cadmium	6020A	1.0
D019	Carbon tetrachloride	8021B 8260B	0.5
D020	Chlordane	8081A	0.03
D021	Chlorobenzene	8021B 8260B	100.0
D022	Chloroform	8021B 8260B	6.0
D007	Chromium	6020A	5.0
D023	o-Cresol	8270D	200.0
D024	m-Cresol	8270D	200.0
D025	p-Cresol	8270D	200.0
D026	Cresol	8270D	200.0
D027	1,4-Dichlorobenzene	8021B 8121 8260B 8270D	7.5
D028	1,2-Dichloroethane	8021B 8260B	0.5
D029	1,1-Dichloroethylene	8021B 8260B	0.7
D030	2,4-Dinitrotoluene	8091 8270D	0.13
D032	Hexachlorobenzene	8121	0.13
D033	Hexachlorobutadiene	8021B 8121 8260B	0.5
D034	Hexachloroethane	8121	3.0
D008	Lead	6020A 7421	5.0
D009	Mercury	7470A 7471B	0.2
D035	Methyl ethyl ketone	8015B 8260B	200.0
D036	Nitrobenzene	8091 8270D	2.0
D037	Pentrachlorophenol	8041	100.0
D038	Pyridine	8260B 8270D	5.0

D010	Selenium	7741A	1.0
D011	Silver	6010C	5.0
D039	Tetrachloroethylene	8260B	0.7
D040	Trichloroethylene	8021B 8260B	0.5
D041	2,4,5-Trichlorophenol	8270D	400.0
D042	2,4,6-Trichlorophenol	8041A 8270D	2.0
D043	Vinyl chloride	8021B 8260B	0.2

If o-, m-, and p-cresol concentrations cannot be differentiated, then the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/L.
If the quantitation limit is greater than the regulatory level, then the quantitation limit becomes the regulatory level.

2.B. CONTINGENCY PLANS: The Permittee shall implement its proposed contingency plan(s) included in its Permit Renewal Application to cope with failure of a system(s) in the Discharge Permit.

2.C. CLOSURE: Prior to closure of the facility, the Permittee shall submit for OCD's approval, a closure plan including a completed form C-103 for plugging and abandonment of the Class I non-hazardous waste injection well (WDW-2). The Permittee shall plug and abandon its Class I non-hazardous waste injection well (WDW-2 pursuant to 20.6.2.5209 NMAC and as specified in Permit Condition 2.D.

1. Pre-Closure Notification: Pursuant to 20.6.2.5005A NMAC, the Permittee shall submit a pre-closure notification to OCD's Environmental Bureau at least 30 days prior to the date that it proposes to close or to discontinue operation of its Class I non-hazardous waste injection well (WDW-2). Pursuant to 20.6.2.5005B NMAC, OCD's Environmental Bureau must approve all proposed well closure activities before the Permittee may implement its proposed closure plan.

2. Required Information: The Permittee shall provide OCD's Environmental Bureau with the following information:

- Name of facility;
- Address of facility;
- Name of Permittee (and owner or operator, if appropriate);
- Address of Permittee (and owner or operator, if appropriate);
- Contact person;
- Phone number;
- Number and type of well(s);
- Year of well construction;
- Well construction details;
- Type of discharge;
- Average flow (gallons per day);

- Proposed well closure activities (*e.g.*, sample fluids/sediment, appropriate disposal of remaining fluids/sediments, remove well and any contaminated soil, clean out well, install permanent plug, conversion to other type of well, ground water and vadose zone investigation, *etc.*);
- Proposed date of well closure;
- Name of Preparer; and,
- Date.

2.D. PLUGGING AND ABANDONMENT PLAN: Pursuant to 20.6.2.5209A NMAC, when the Permittee proposes to plug and abandon its Class I non-hazardous waste injection well (WDW-2), it shall submit to OCD a plugging and abandonment plan that meets the requirements of 20.6.2.3109C NMAC, 20.6.2.5101C NMAC, and 20.6.2.5005 NMAC for protection of ground water. If requested by OCD, Permittee shall submit for approval prior to closure, a revised or updated plugging and abandonment plan. The obligation to implement the plugging and abandonment plan as well as the requirements of the plan survives the termination or expiration of this Discharge Permit. The Permittee shall comply with 20.6.2.5209 NMAC.

2.E. RECORD KEEPING: The Permittee shall maintain records of all inspections required by this Discharge Permit at its Facility office for a minimum of five years and shall make those records available for inspection by OCD.

2.F. RELEASE REPORTING: The Permittee shall comply with the following permit conditions, pursuant to 20.6.2.1203 NMAC, if it determines that a release of oil or other water contaminant, in such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property, has occurred. The Permittee shall report unauthorized releases of water contaminants in accordance with any additional commitments made in its approved Contingency Plan. If the Permittee determines that any constituent exceeds the standards specified in 20.6.2.3103 NMAC, then it shall report a release to OCD's Environmental Bureau.

1. Oral Notification: As soon as possible after learning of such a discharge, but in no event more than twenty-four (24) hours thereafter, the Permittee shall notify OCD's Environmental Bureau. The Permittee shall provide the following:

- The name, address, and telephone number of the person or persons in charge of the facility, as well as of the owner and/or operator of the facility;
- The name and location of the facility;
- The date, time, location, and duration of the discharge;
- The source and cause of discharge;
- A description of the discharge, including its chemical composition;
- The estimated volume of the discharge; and,
- Any corrective or abatement actions taken to mitigate immediate damage from the discharge.

2. Written Notification: Within one week after the Permittee has discovered a discharge, the Permittee shall send written notification (may use form C-141 with attachments) to OCD's Environmental Bureau verifying the prior oral notification as to each of the foregoing items and providing any appropriate additions or corrections to the information contained in the prior oral notification.

The Permittee shall provide subsequent written reports as required by OCD's Environmental Bureau.

2.G. OTHER REQUIREMENTS:

1. Inspection and Entry: Pursuant to Section 74-6-9 NMSA 1978 and 20.6.2.3107A NMAC, the Permittee shall allow any authorized representative of the OCD Director, to:

- Upon the presentation of proper credentials, enter the premises at reasonable times;
- Inspect and copy records required by this Discharge Permit;
- Inspect any treatment works, monitoring, and analytical equipment;
- Sample any effluent before or after discharge; and,
- Use the Permittee's monitoring systems and wells in order to collect samples.

2. Advance Notice: The Permittee shall provide OCD's Environmental Bureau and Artesia District Office with at least five (5) working days advance notice of any environmental sampling to be performed pursuant to this Discharge Permit, or any well plugging, abandonment or decommissioning of any equipment associated with its Class I non-hazardous waste injection well (WDW-2).

3. Environmental Monitoring: The Permittee shall ensure that any environmental sampling and analytical laboratory data collected meets the standards specified in 20.6.2.3107B NMAC. The Permittee shall ensure that all environmental samples are analyzed by an accredited "National Environmental Laboratory Accreditation Conference" (NELAC) Laboratory. The Permittee shall submit data summary tables, all raw analytical data, and laboratory Quality Assurance/Quality Control (QA/QC).

2.H. BONDING OR FINANCIAL ASSURANCE: Pursuant to 20.6.2.5210B(17) NMAC, the Permittee shall maintain at a minimum, a single well plugging bond in the amount that it shall determine, in accordance with Permit Condition 5.B, to cover potential costs associated with plugging and abandonment of the Class I non-hazardous waste injection well (WDW-2), surface restoration, and post-operational monitoring, as may be needed. OCD may require additional financial assurance to ensure adequate funding is available to plug and abandon the well and/or for any required corrective actions.

Methods by which the Permittee shall demonstrate the ability to undertake these measures shall include submission of a surety bond or other adequate assurances, such as financial statements or other materials acceptable to the OCD Director, such as: (1) a surety bond; (2) a trust fund with a New Mexico bank in the name of the State of New Mexico, with the State as Beneficiary; (3) a

non-renewable letter of credit made out to the State of New Mexico; (4) liability insurance specifically covering the contingencies listed in this paragraph; or (5) a performance bond, generally in conjunction with another type of financial assurance. If an adequate bond is posted by the Permittee to a federal or another state agency, and this bond covers all of the measures specified above, the OCD Director shall consider this bond as satisfying the bonding requirements of Sections 20.6.2.5000 through 20.6.2.5299 NMAC wholly or in part, depending upon the extent to which such bond is adequate to ensure that the Permittee will fully perform the measures required herein above.

2.I. REPORTING:

1. Quarterly Reports: The Permittee shall submit its annual report pursuant to 20.6.2.3107 NMAC to OCD's Environmental Bureau by **March 15th** of the following year. The annual report shall include the following:

a. The physical, chemical and other relevant characteristics of injection fluids;

b. Monthly average, maximum and minimum values for injection pressure, flow rate and volume, and annular pressure; and

c. The results of monitoring prescribed under Section 20.6.2.5207B NMAC.

d. Weekly expansion tank volume fluid readings and the fluid volume additions or removals from the expansion tank.

2. Annual Report: The Permittee shall submit its annual report pursuant to 20.6.2.3107 NMAC to OCD's Environmental Bureau by **June 1st** of the following year. The annual report shall include the following:

- Cover sheet marked as "Annual Class I Non-Hazardous Waste Injection Well (WDW-2), Name of Permittee, Discharge Permit Number, API number of well, date of report, and person submitting report;
- Summary of Class I non-hazardous waste injection well (WDW-2) operations for the year including a description and reason for any remedial or major work on the well with a copy of form C-103(s);
- Monthly injection/disposal volume, including the cumulative total should be carried over to each year;
- Maximum and average injection pressures;
- A copy of the quarterly chemical analyses shall be included with data summary and all QA/QC information;
- Copy of any mechanical integrity test chart(s), including the type of test, *i.e.*, duration, gauge pressure, *etc.;*
- Copy of fall-of test charts;
- Summary tables listing environmental analytical laboratory data for quarterly waste fluid samples. Any 20.6.2.3103 NMAC constituent(s) found to exceed a water quality standard shall be highlighted and noted in the annual report. The Permittee

shall include copies of the most recent year's environmental analytical laboratory data sheets with QA/QC summary sheet information in conformance with the National Environmental Laboratory Accreditation Conference (NELAC) and EPA Standards;
- Brief explanation describing deviations from the normal injection operations;
- Results of any leaks and spill reports (include any C-141 reports);
- An Area of Review (AOR) annual update summary;
- A summary with interpretation of MITs, Fall-Off Tests, *etc.*, with conclusion(s) and recommendation(s);
- Records of the expansion tank monitoring pressure, fluid removals and/or additions indicating the well MIT condition;
- A summary of all major Facility activities or events, which occurred during the year with any conclusions and recommendations;
- A summary of any new discoveries of ground water contamination with all leaks, spills and releases and corrective actions taken; and,
- The Permittee shall file its Annual Report in an electronic format with a hard copy submittal to OCD's Environmental Bureau.

3. CLASS I NON-HAZARDOUS WASTE INJECTION WELL (WDW-2) OPERATIONS:

3.A. OPERATING REQUIREMENTS: The Permittee shall comply with the operating requirements specified in 20.6.2.5206A NMAC and 20.6.2.5206B NMAC to ensure that:

1. The maximum injection pressure at the wellhead shall not initiate new fractures or propagate existing fractures in the confining zone, or cause the movement of injection or formation fluids into ground water having 10,000 mg/l or less TDS except for fluid movement approved pursuant to 20.6.2.5103 NMAC and during well stimulation.

2. Injection between the outermost casing and the well bore is prohibited in a zone other than the authorized injection zone. If the Permittee determines that its Class I non-hazardous waste injection well (WDW-2) is discharging or suspects that it is discharging fluids into a zone or zones other than the permitted injection zone specified in Permit Condition 3.B.1., then the Permittee shall cease operations until proper repairs are made, notify the OCD's Environmental Bureau and Artesia District office within 24 hours, and shall not resume injection until the permittee has received approval from the OCD.

3. The annulus between the tubing, packer, and the intermediate casing shall be filled with a fluid approved by the OCD Director and a pressure, also approved by the OCD Director shall be maintained on the annulus.

3.B. INJECTION OPERATIONS:

1. Injection Formation, Interval, and Waste Fluids: The Permittee shall inject only non-hazardous (RCRA exempt and RCRA non-hazardous, non-exempt) oil field waste fluid into the Lower Wolfcamp, Cisco, and Canyon Formations from 7,570 feet to 8,399 feet in its Class I non-hazardous waste injection well (WDW-2). The surface casing is set at 1,995 feet;

the intermediate casing or production casing is set at 8,869 feet; the injection tubing is set at approximately 7,528 feet; and the packer is set at approximately 7,528 feet. A cement plug is set at 8,770 feet and bottom cement plug is set from 9,675 – 9,775 feet. The top cement plug is set in the intermediate casing and confines the Class I non-hazardous injection well (WDW-2) to the injection interval. The bottom cement plug is set within the open borehole and serves as a second barrier to flow with well TD at 10,372 feet. The Permittee shall ensure that the injected waste fluid enters perforations only within the above specified injection interval and is not permitted to escape to other formations or onto the surface.

2. Well Injection Pressure Limits and Injection Flow Rate: The Permittee shall ensure that the maximum wellhead or surface injection pressure on its Class I non-hazardous waste injection well (WDW-2) shall not exceed 1,510 psig and that the injection flow rate shall not exceed 500 gpm.

3. Pressure Limiting Device: The Permittee shall equip and operate its Class I non-hazardous waste injection well (WDW-2) or system with a pressure limiting device, or equivalent (*i.e.*, Murphy switch), in working condition which shall at all times limit surface injection pressure to the maximum allowable pressure for its Class I non-hazardous waste injection well (WDW-2).

The Permittee shall inspect and monitor the pressure-limiting device daily and shall report any pressure exceedances within 24 hours of detection to OCD's Environmental Bureau and Artesia District Office. The Permittee shall take all steps necessary to ensure that the injected waste fluids enter only the proposed injection interval and are not permitted to escape to other formations or onto the ground surface. The Permittee shall report to OCD's Environmental Bureau within 24 hours of discovery any indication that new fractures or existing fractures have been propagated, or that damage to the well, the injection zone, or formation has occurred.

OCD may authorize an increase in surface injection pressure if the Permittee performs a valid Step-Rate Test (SRT), which demonstrates that the proposed maximum surface injection pressure is less than the injection zone fracture pressure with an acceptable safety factor. If approvable, the Permittee must apply for a modification to this Discharge Permit pursuant to 20.6.2.3109 NMAC.

3.C. CONTINUOUS MONITORING DEVICES: The Permittee shall use continuous monitoring devices to provide a record of injection pressure, flow rate, flow volume, and pressure on the annulus between the tubing and the intermediate casing.

3.D. MECHANICAL INTEGRITY FOR CLASS I NON-HAZARDOUS WASTE INJECTION WELLS:

1. Pursuant to 20.6.2.5204 NMAC, the Permittee shall conduct a mechanical integrity test (MIT) for its Class I non-hazardous waste injection well (WDW-2) at least once every five years or more frequently as the OCD Director may require for good cause during the life of the well. The Permittee shall also demonstrate mechanical integrity for its Class I non-hazardous waste injection well (WDW-2) by running a MIT every time it performs a well

workover, including when it pulls the tubing or reseats the packer. The Permittee shall request MIT approval using form C-103 (Sundry Notices and Reports on Wells) with copies sent to OCD's Environmental Bureau and Artesia District Office. The Permittee shall notify OCD's Environmental Bureau 5 days prior to conducting any MIT to allow OCD the opportunity to witness the MIT.

The Permittee shall conduct a casing-tubing annulus MIT from the surface to the approved injection depth to assess casing and tubing integrity. The MIT shall consist of a 30-minute test at a minimum pressure of 300 psig measured at the surface. The Permittee shall follow OCD's 2004 *New Mexico Oil Conservation Division Underground Injection Control Program Manual* guidance when conducting a MIT. The Permittee shall submit the results of its MIT to OCD's Environmental Bureau and Artesia District Office within 30 days of completion. If any remedial work or any other workover operations are necessary, the Permittee shall comply with Permit Condition 3.F.

2. A Class I non-hazardous waste injection well has mechanical integrity if there is no detectable leak in the intermediate casing, tubing and/or packer which OCD considers to be significant at maximum operating temperature and pressure, and no detectable conduit for fluid movement out of the injection zone through the well bore, or vertical channels adjacent to the well bore which the OCD considers to be significant. The following criteria will determine if the Class I non-hazardous waste injection well (WDW-2) has passed the MIT:

a. The MIT passes if there is zero bleed-off during the test;

b. The MIT passes if there is a less than a ± 10% change in the final test pressure compared to the starting pressure, if approved by OCD;

c. The MIT fails if there is more than 10% reduction in the final test pressure compared to the starting pressure or that the pressure does not stabilize within 10% of the starting pressure before the end of the MIT. The Permittee shall shut-in the well and investigate for leaks in accordance with Permit Condition 3.F. The Permittee shall not resume injection operations until approved by OCD.

d. When the MIT is not witnessed by OCD and fails, the Permittee shall shut-in the well and notify OCD within 24 hours of the failure of the MIT.

3. Pursuant to 20.6.2.5204C NMAC, the OCD Director may consider the use of equivalent alternative test methods to determine mechanical integrity. The Permittee shall submit information on the proposed test and all technical data supporting its use. The OCD Director may approve the Permittee's request if it will reliably demonstrate the mechanical integrity of the well for which its use is proposed.

4. Pursuant to 20.6.2.5204D NMAC, when conducting and evaluating the MIT(s), the Permittee shall apply methods and standards generally accepted in the oil and gas industry. When the Permittee reports the results of all MIT(s) to the OCD Director, it shall include a description of the test(s), the method(s) used, and the test results.

5. The Permittee shall conduct a Bradenhead test at least annually and each time that it conducts an MIT.

3.E. FALL-OFF TEST: The Permittee shall conduct a Fall-Off Test (FOT) to monitor the injection zone formation characteristics and pressure buildup over time in the injection zone at least every three years. The Permittee shall request FOT approval using form C-103 (Sundry Notices and Reports on Wells) sent to OCD's Environmental Bureau and Artesia District Office.

The Permittee shall follow OCD's 2007 *New Mexico Oil Conservation Division UIC Class I Well Fall-Off Test Guidance* or other OCD-approved FOT when conducting a FOT and shall shut down the well for a time sufficient to conduct a valid observation of the pressure fall-off curve. The Permittee shall submit the results of its FOT to OCD's Environmental Bureau and Artesia District Office within 30 days of completion, including color copies of the original charts.

3.F. WELL WORKOVER OPERATIONS: Pursuant to 20.6.2.5205A(5) NMAC, the Permittee shall provide notice to and shall obtain approval from OCD's Environmental Bureau prior to commencement of any remedial work or any other workover operations to allow OCD the opportunity to witness the operation. The Permittee shall request approval using form C-103 (Sundry Notices and Reports on Wells) with copies sent to OCD's Environmental Bureau and Artesia District Office. After completing remedial work, pressure tests, or any other workover operations, the Permittee shall run a MIT in accordance with Permit Condition 3.D to verify that the remedial work has successfully repaired any problems.

3. G. EXTERNAL EXPANSION TANK: The Permittee shall equip its Class I non-hazardous waste injection well (WDW-2) with an external expansion tank system under constant 100 psig pressure connected to the tubing, packer and intermediate casing-annulus. The Permittee shall fill the external expansion tank half-full with an OCD-approved liquid to establish an equilibrium volume and liquid level. The Permittee shall monitor the liquid levels in the external expansion tank at least weekly and shall record all additions or removals of liquids into or out of the external expansion tank. The Permittee shall record any loss or gain of fluids in the external expansion tank, and shall verbally notify OCD's Environmental Bureau within 5 days of any loss or gain of fluid greater than 5 barrels per month and shall comply with Permit Condition 3.F.

The Permittee shall provide the weekly expansion tank volume fluid volumes readings and the fluid volume additions or removals from the expansion tank on a quarterly basis and in the annual report.

3.H. INJECTION RECORD VOLUMES AND PRESSURES: The Permittee shall submit quarterly reports of its injection operations and well workovers. The Permittee shall record the minimum, maximum, and average flow waste injection volumes (including total volumes) and annular pressures of the injected waste fluids on a monthly basis, and shall submit the data to OCD on a quarterly basis and in the annual report. The Permittee shall fill the casing-tubing

annulus with an OCD-approved liquid and install a Murphy pressure switch or equivalent, as described in the Permittee's permit renewal application, in order to detect leakage in the casing, tubing, or packer.

3.I. AREA OF REVIEW (AOR): The Permittee shall orally report to OCD's Environmental Bureau within 72 hours of discovery of any new wells, conduits, or any other device that penetrates or may penetrate the injection zone within a 1-mile radius from its Class I non-hazardous waste injection well (WDW-2).

4. CLASS V WELLS: Pursuant to 20.6.2.5002B NMAC, leach fields and other waste fluids disposal systems that inject non-hazardous fluid into or above an underground source of drinking water are UIC Class V injection wells. This Discharge Permit does not authorize the use of a Class V injection well for the disposal of industrial waste. Pursuant to 20.6.2.5005 NMAC, the Permittee shall close any Class V industrial waste injection well that injects non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes (*e.g.*, septic systems, leach fields, dry wells, *etc*.) within 90 calendar days of the issuance of this Discharge Permit. The Permittee shall document the closure of any Class V wells used for the disposal of non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes other than contaminated ground water in its Annual Report. Other Class V wells, including wells used only for the injection of domestic wastes, shall be permitted by the New Mexico Environment Department.

5. SCHEDULE OF COMPLIANCE:

5.A. QUARTERLY AND ANNUAL REPORTS: The Permittee shall submit its quarterly and annual reports to OCD as specified in Permit Condition 2.I.

5.B. BONDING OR FINANCIAL ASSURANCE: The Permittee shall submit an estimate of the minimum cost to properly close, plug and abandon its Class I non-hazardous waste injection well (WDW-2), conduct ground water restoration if applicable, and any post-operational monitoring as may be needed (see 20.6.2.5210B(17) NMAC) within 90 days of permit issuance (see 20.6.2.5210B(17) NMAC). The Permittee's cost estimate shall be based on third person estimates. After review, OCD will require the Permittee to submit a single well plugging bond based on the third person cost estimate.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, October 30, 2013 7:23 AM
To: Schultz, Michele (Michele.Schultz@hollyfrontier.com)
Cc: Holder, Mike (Michael.Holder@hollyfrontier.com); Dawson, Scott, EMNRD; Sanchez, Daniel J., EMNRD; VonGonten, Glenn, EMNRD
Subject: Affidavit of Publication WDWs 1 & 2

Micki:

Received.

The English and Spanish versions of WDWs 1 and 2 were posted on 10/23/2013. The OCD notices that both versions were posted and contact names were provided in both English and Spanish versions; therefore, the public notices are satisfactory and appear to address the intent of 20.6.2.3108 NMAC.

Pending any public comments and/or protests, OCD will likely issue the final permits soon after 11/23/2013.

Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Department
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Drive, Santa Fe, New Mexico 87505
Office: (505) 476-3490
E-mail: CarlJ.Chavez@State.NM.US
Website: http://www.emnrd.state.nm.us/ocd/
"Why Not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward With the Rest of the Nation?" To see how, please go to: "Pollution Prevention & Waste Minimization" at http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental

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2013 OCT 29 P 1:39

October 24, 2013

Mr. Carl J. Chavez
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Certified Mail/Return Receipt
7011 3500 0001 4786

RE: Affidavit of Publication for WDW-1 and WDW-2 Permit renewal
Navajo Refining Co. L.L.C.

Dear Mr. Chavez:

In accordance with Section D of 20.6.2.3108 NMAC Public Notice and Participation, Navajo Refining Company is submitting the Affidavits of Publication for the public notice requirements indicated in Section C for our Class 1 Injection Well Discharge Permits for WDW-1 and WDW-2. The Notices were published on October 23, 2013.

The English Notice for WDW-1 will be re-published with the addition of the last paragraph in Spanish. This paragraph was inadvertently omitted by the publisher.

If you have questions regarding this submittal, please contact me by email at micki.schultz@hollyfrontier.com, or by phone at 575-746-5281.

Cordially,

Micki Schultz

Micki Schultz, P.E., CHMM
Environmental Specialist

Env. File: WDW-1 and WDW-2 UIC Permit Renewal (REF.ART.13-4.A.02.D)

Navajo Refining Company, LLC
PO Box 159 • Artesia, NM 88211-0159 • (575) 748-3311
http://www.hollyfrontier.com

Affidavit of Publication

NO. 22747

STATE OF NEW MEXICO

County of Eddy:

Danny Scott

being duly sworn, says that he is the **Publisher**

of the Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and state, and that the hereto attached

Display Ad

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/days on the same day as follows:

First Publication October 23, 2013

Second Publication

Third Publication

Fourth Publication

Fifth Publication

Subscribed and sworn to before me this

23rd day of October 2013

OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 5/12/2015

Latisha Romine
Notary Public, Eddy County, New Mexico

PUBLIC NOTICE

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

In accordance with 20.6.2.3108.F NMAC, Navajo Refining Company, L.L.C. hereby gives public notice of its application to renew the New Mexico Oil Conservation Division (OCD) discharge permit to inject treated non-hazardous waste water effluent from the refinery's on-site wastewater treatment plant into a Class I (nonhazardous) injection well WDW-2 (API# 30-015-20894). The WDW-2 is located in the SW/4, NW/4 of Section 12, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico. The WDW-2 is located approximately 10 miles SE of the intersection of I-285 and Hwy 82 or approximately 3 miles south of the intersection of Hwy 82 and CR-204 (Hilltop Road). The Navajo Refinery is located at 501 E. Main Street, Artesia, New Mexico.

Waste water from the refinery is generated from the treatment of waters from the processing of crude oil, including the removal of water entrained in crude oil, the washing of crude oil to remove salts and sediment, water used for heating and cooling during refining, boiler blowdown, and stormwater collected from process portions of the refinery.

Underground injection at WDW-2 occurs within the Lower Wolfcamp, Cisco and Canyon Formations within the injection interval from 7,570 to 8,399 feet (log depth). The injection rate into WDW-2 will not exceed 500 gpm and the maximum allowable surface injection pressure is 1,510 psig. The injected refinery waste water quality is approximately 3,400 mg/L total dissolved solids (TDS). Formation fluid within the permitted injection interval exceeds 10,000 mg/L TDS. Groundwater is first encountered in the area of WDW-2 at a depth of approximately 50 to 150 feet below land surface. The groundwater quality ranges from about 1,500 to 2,200 mg/L TDS.

Persons interested in obtaining further information, submitting comments, or requesting to be on a facility-specific mailing list for future notices may contact the Environmental Bureau Chief of the New Mexico Oil Conservation Division.

Comments and inquiries on regulations should be directed to:

Director
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Telephone: (505) 476-3440

When corresponding, please reference the name of the applicant and the well name.

OCD Bilingual Spanish Language Point-of-Contact
Las personas interesadas en obtener mayores informes, presentar sus comentarios o solicitar que se les incluya en las listas para futuros avisos. Para mayor información, contactar el Jefe del Departamento del Medio Ambiente de la División de Conservacion de Petróleo de Nuevo México (Contacto: Laura Tulk (575) 748-1283.)
Por Favor envien los comentarios y las preguntas a:
Director
New Mexico Oil Conservation Division
1220 South St. Francis Drive

Affidavit of Publication

NO. 22747

STATE OF NEW MEXICO

County of Eddy:

Danny Scott

being duly sworn, says that he is the **Publisher**

of the Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and state, and that the hereto attached

Display Ad

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1 Consecutive weeks/days on the same day as follows:

First Publication October 23, 2013

Second Publication

Third Publication

Fourth Publication

Fifth Publication

Subscribed and sworn to before me this

23rd day of October 2013

OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 5/12/2015

Latisha Romine
Notary Public, Eddy County, New Mexico

Copy of Publication:

AVISO PUBLICO
ESTADO DE NUEVO MEXICO
DEPARTMENTO DE ENERGIA, MINERALES Y RECURSOS NATURALES
DIVISION DE CONSERVACION DE PETROLEO

Por medio de la presente, Navajo Company anuncia que de conformidad con los requisitos de las regulaciones de la Comisión de Control de Calidad del Agua de Nuevo México 20.6.2.3108.F NMAC, a la División de Conservación del Petróleo de Nuevo México (NMOCD). Departamento del Medio Ambiente, un permiso de descarga para la inyección aguas residuales de la planta Artesia de Navajo Refining Company, en el pozo de inyección de denominación WDW-2 (API#30-015-20894). El pozo WDW-2 esta localizado en SW/4, NW/4 de Sección 12, Municipio 18 sur, 27 este Condado Eddy, Nuevo México. El WDW-2 está localizado aproximadamente a 10 millas SE de la intersección de I-285 y Hwy 82 (Refinería Artesia), o aproximadamente 3 millas SE de Hwy. 82 y CR-204 (Hilltop Road). La Refinería Artesia se encuentra ubicada en 501 E. Main Street, Artesia, Nuevo México.

La generación de aguas residuals de la Refinería Artesia es el resultado del agua que se encuentran en al abastecimiento de crudo, el agua que se usa para el enfriamiento y calentamiento, el agua que se usa para retirar las sales del abastecimiento de crudo, y para purgar la caldera.

Las aguas residuals de WDW-2 se injectarán hacia las formaciones de Lower Wolfcamp, Cisco Y Canyon, ubicadas entre 7,570 y 8,399 pies (produndidad de registro). La tasa de inyección de WDW-2 no excederá los 500 gpm a una presión de inyección que no excederá los 1510 psig. Estas aguas residuals tendrán un contendido de total de sólidos disueltos (TDS) de 3,400 partes por millón. En el área en donde se encuentra el pozo (WDW-2), el agua subterránea se encuentra a una profundidad de 50 a 150 pies con un TDS de 1,500 a 2,200 partes por millón.

Personas interesadas en obtener mayores informes, presentar sus comentarios o solicitar que se les incluya en las listas de direcciones de una planta en especial para futuros avisos pueden ponerse en contacto con el Jefe del Departamento del Medio Ambiente de la División de Conservación de Petróleo de Nuevo México. (Contacto: Laura Tulk (575) 748-1283.)

Por favor enviar comentarios y preguntas a:
Director
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Teléfono: (505) 476-3440

Por favor incluir como referencia el nombre del applicante y denominación del pozo.

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of Check No. 1000229498 dated 7/10/13

or cash received on 7/26/13 in the amount of $ 100.00

from Navajo Refining Company

for Application Permit

Submitted by: Carl Chavez Date: 7/26/13

Submitted to ASD by: Rachel Herrera Date: 7/29/13

Received in ASD by: _____ Date: _____

Filing Fee X New Facility: _____ Renewal: _____

Modification _____ Other _____

Organization Code 521.07 Applicable FY FY14

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

New Mexico Environment Department Revenue Transmittal

		Description	Fund	CES	DFA Org.	DFA Acct.	ED Org.	ED Acct.	Amount	
	1	CY Reimbursement Project Tax	064	01						1
	2	Gross Receipt Tax	064	01		2329	900000	2329134		2
	3	Air Quality Title V	092	13		1690	900000	4169134		3
	4	PRP Prepayments	248	14		9690	900000	4969014		4
	5	Climax Chemical Co.	248	14		9690	900000	4969015		5
	6	Circle K Reimbursements	248	14		9690	900000	4969248		6
	7	Hazardous Waste Permits	339	27		1690	900000	4169027		7
	8	Hazardous Waste Annual Generator Fees	339	27		1690	900000	4169339		8
	9	Water Quality - Drinking Water	340	28		1690	900000	4169028		9
	10	Water Quality - Oil Conservation Division	341	29		2329	900000	2329029	350.00	10
	11	Water Quality - GW Discharge Permit	341	29		1690	900000	4169029		11
	12	Air Quality Permits	631	31		1690	900000	4169031		12
	13	Payments under Protest	651	33		2919	900000	2919033		13
*	14	Xerox Copies	652	34		2349	900000	2349001		14
	15	Ground Water Penalties	652	34		2349	900000	2349002		15
	16	Witness Fees	652	34		2349	900000	2349003		16
	17	Air Quality Penalities	652	34		2349	900000	2349004		17
	18	OSHA Penalties	652	34		2349	900000	2349005		18
	19	Prior Year Reimbursement	652	34		2349	900000	2349006		19
	20	Surface Water Quality Certification	652	34		2349	900000	2349009		20
	21	Jury Duty	652	34		2349	900000	2349012		21
	22	CY Reimbursements (i.e.: telephone)	652	34		2349	900000	2349014		22
*	23	UST Owners List	783	24		9690	900000	4969201		23
*	24	Hazardous Waste Notifiers List	783	24		9690	900000	4969202		24
*	25	UST Maps	783	24		9690	900000	4969203		25
*	26	UST Owners Update	783	24		9690	900000	4969205		26
*	28	Hazardous Waste Regulations	783	24		9690	900000	4969207		28
*	29	Radiologic Tech. Regulations	783	24		9690	900000	4969208		29
*	30	Superfund CERCLIS List	783	24		9690	900000	4969211		30
*	31	Solid Waste Permits Fees	783	24		9690	900000	4969213		31
	32	Smoking School	783	24		9690	900000	4969214		32
*	33	SWQB - NPS Publications	783	24		9690	900000	4969222		33
*	34	Radiation Licensing Regulations	783	24		9690	900000	4969228		34
*	35	Sale of Equipment	783	24		9690	900000	4969301		35
*	36	Sale of Automobile	783	24		9690	900000	4969302		36
**	37	Lust Recoveries	783	24		9690	900000	4969614		37
**	38	Lust Prepayments	783	24		9690	900000	4969615		38
	39	Surface Water Publication	783	24		9690	900000	4969801		39
	40	Exxon Reese Drive Ruidoso - CAF	783	24		9690	900000	4969242		40
	41	Emerg. Hazardous Waste Penalties NOV	957	32		1640	900000	4164032		41
	42	Radiologic Tech. Certification	987	05		1690	900000	4169005		42
	44	UST Permit Fees	989	20		1690	900000	4169020		44
	45	UST Tank Installers Fees	989	20		1690	900000	4169021		45
	46	Food Permit Fees	991	26		1690	900000	4169026		46
	43	Other								43

* Gross Receipt Tax Required ** Site Name & Project Code Required TOTAL:

Contact Person: Glenn VonGonten Phone #: 476-3488 Date: 7/29/13

Received in ASD By: _____ Date: _____ RT #: _____ ST# _____

FSB025

NEW MEXICO ENVIRONMENT DEPARTMENT - ALBUQUERQUE FIELD OFFICE DAILY CHECK RECEIPT LOG

DATE RECEIVED	WALK IN	MAIL	NAME ON CHECK	DATE OF CHECK	CHECK/MONEY ORDER#	PROGRAM ACCOUNT CODE	AMOUNT OF CHECK	DATE DEPOSITED	DEPOSITED BY:
7/26/13		X	Kinder Morgan Production	7/17/13	214479		250.00		
7/26/13		X	Navajo Refining	7/10/13	1000229498		100.00		
TOTAL							350.00 ~~$0.00~~		

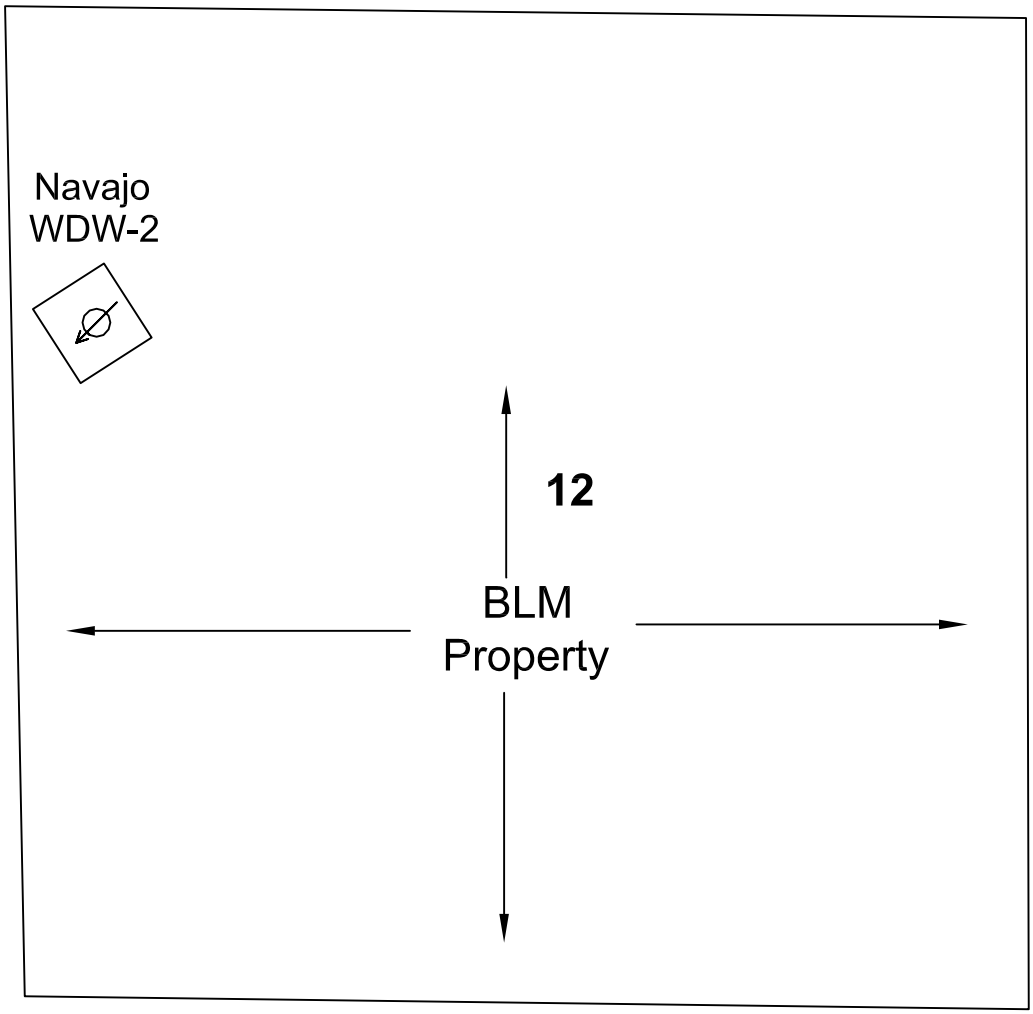
REVENUE TRANSMITTAL SHEET

Description	Fund	Dept.	Share Acct	Sub Acct	Amount
Liquid Waste	34000	Z3200	496402		
Water Recreation Facilities	40000	Z8501	496402		
Food Permit Fees	99100	Z2600	496402		
OTHER					

APPENDIX A

SURROUNDING LAND OWNERSHIP INFORMATION

SUBSURFACE



Section 12, Township 18 South, Range 27 East

NOTE: The U.S. Department of the Interior, Bureau of Land Management owns all land in Section 12, Township 18 South, Range 27 East. Navajo WDW-2 Class I Non-Hazardous Waste Injection well is located on land owned by the BLM.

SUBSURFACE

Houston, TX
South Bend, IN
Baton Rouge, LA

APPENDIX A

NAVAJO REFINING COMPANY, L.L.C.
ARTESIA, NEW MEXICO

SURROUNDING LAND OWNERSHIP INFORMATION

DATE: 06/25/13	CHECKED BY:	JOB NO: 60D6945
DRAWN BY: WDD	APPROVED BY:	DWG NO:

APPENDIX B

AREA OF REVIEW WELL FILES AND SCHEMATICS

SUBSURFACE

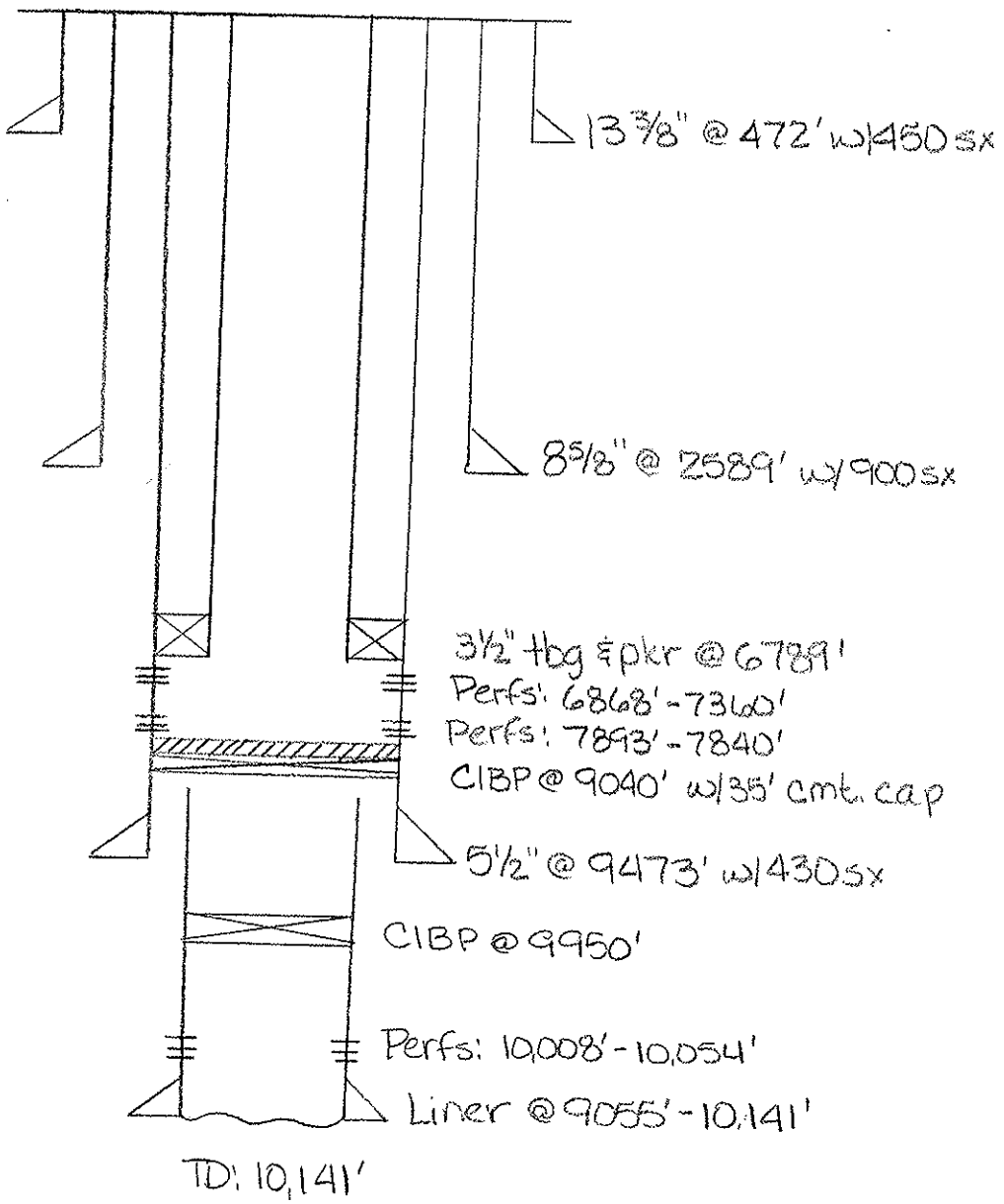
SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 10
Artificial Penetration Review

OPERATOR Lime Rock Resources
LEASE Federal T SWD
WELL NUMBER 1
DRILLED 6-28-90
PLUGGED NA

STATUS Active SWD
LOCATION Sec. 12 -T18S-R27E
MUD FILLED BOREHOLE NA
TOP OF INJECTION ZONE 7449'
API NO. 30-015- 26404

REMARKS: Cal. Top of Cement @ 6967'



Map ID 10

Queen	1219
Grayburg	1712
San Andres	2063
Glorieta	3680
Abo	
Wolfcamp	
Penn	8160
Strawn	8880
Atoka	9520
Morrow	9765

30-015-26404

Ogrid 14744
prop - [illegible]
pool - 78890 - N. Millman Camp Mesa

1920410-O
1920430-G
1920450-W

Initial

[illegible] 14-91

2-14-91

Dual Ind.

2583-9170

Dual Lat

9480-10126

Dual Spaced Neutron

[illegible]

Dual Spaced Neutron

8800-10141

NSL-2785

5-3-90

Cem Bond Log

6000-8090

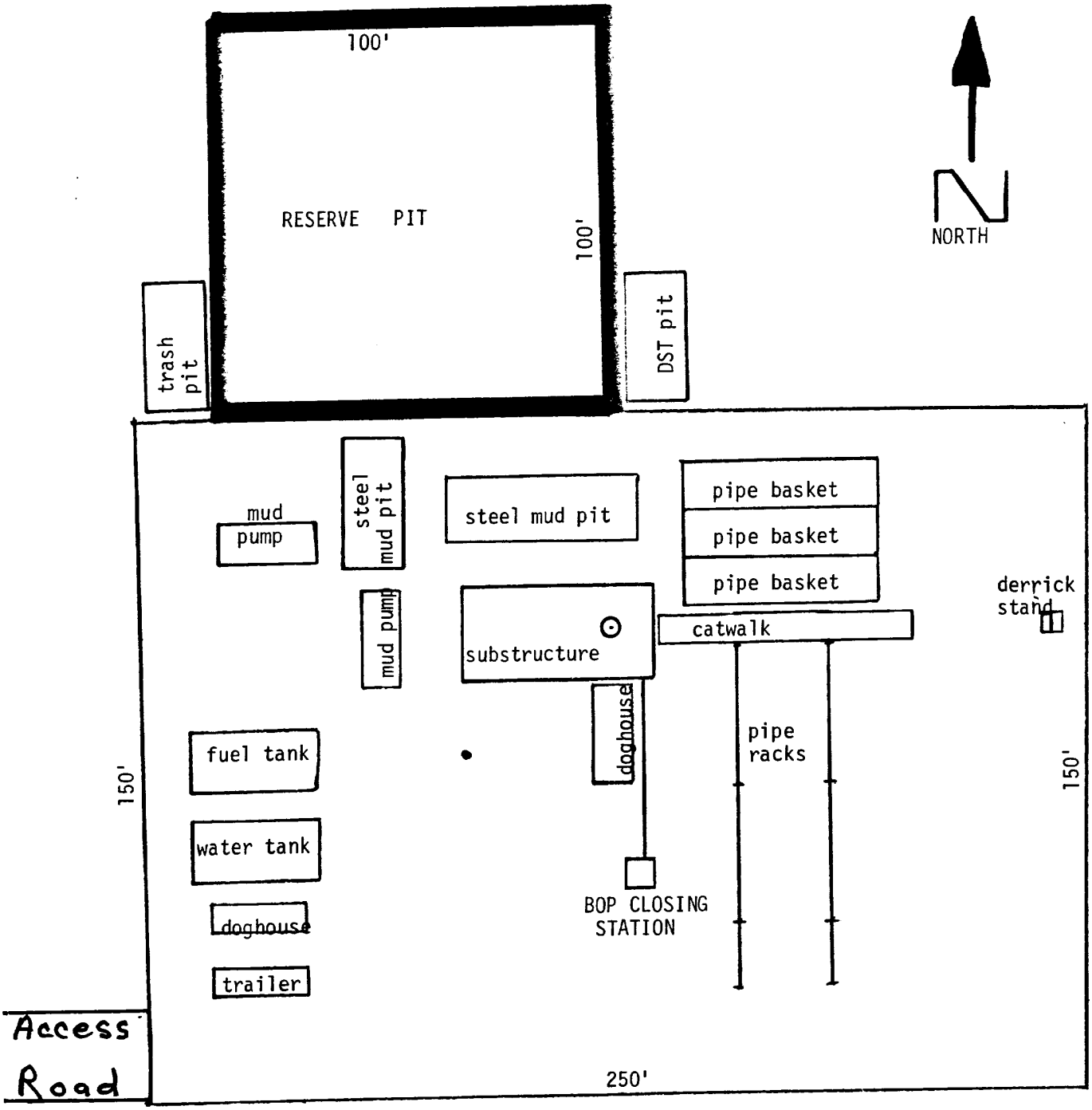


EXHIBIT "C"

MEWBOURNE OIL COMPANY
FEDERAL "T" # 1
LEASE # NM-42410
990' FEL & 660' FNL
SEC. 12-T18S-R27E
EDDY COUNTY, NEW MEXICO

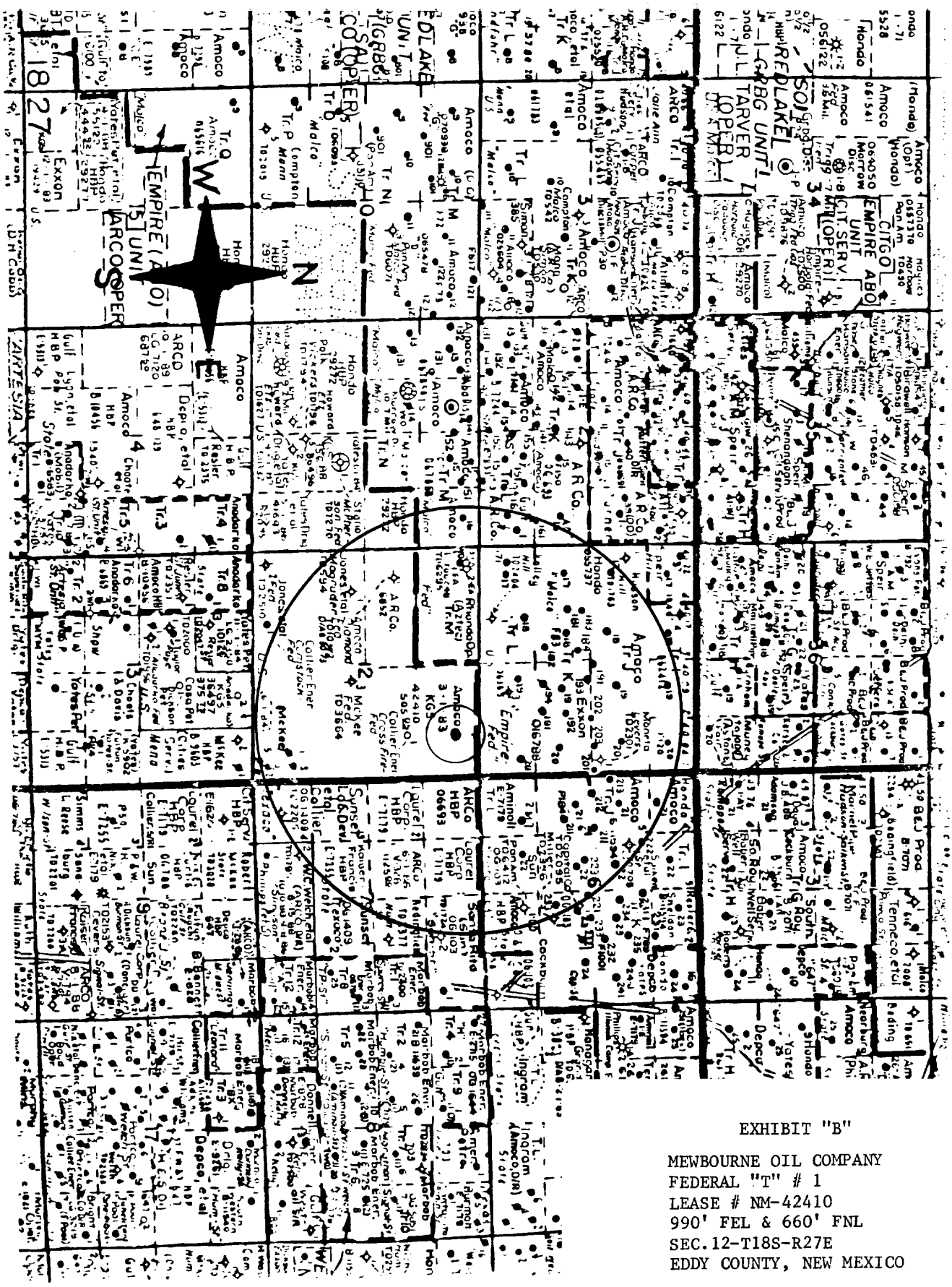


EXHIBIT "B"

MEWBOURNE OIL COMPANY
FEDERAL "T" # 1
LEASE # NM-42410
990' FEL & 660' FNL
SEC.12-T18S-R27E
EDDY COUNTY, NEW MEXICO

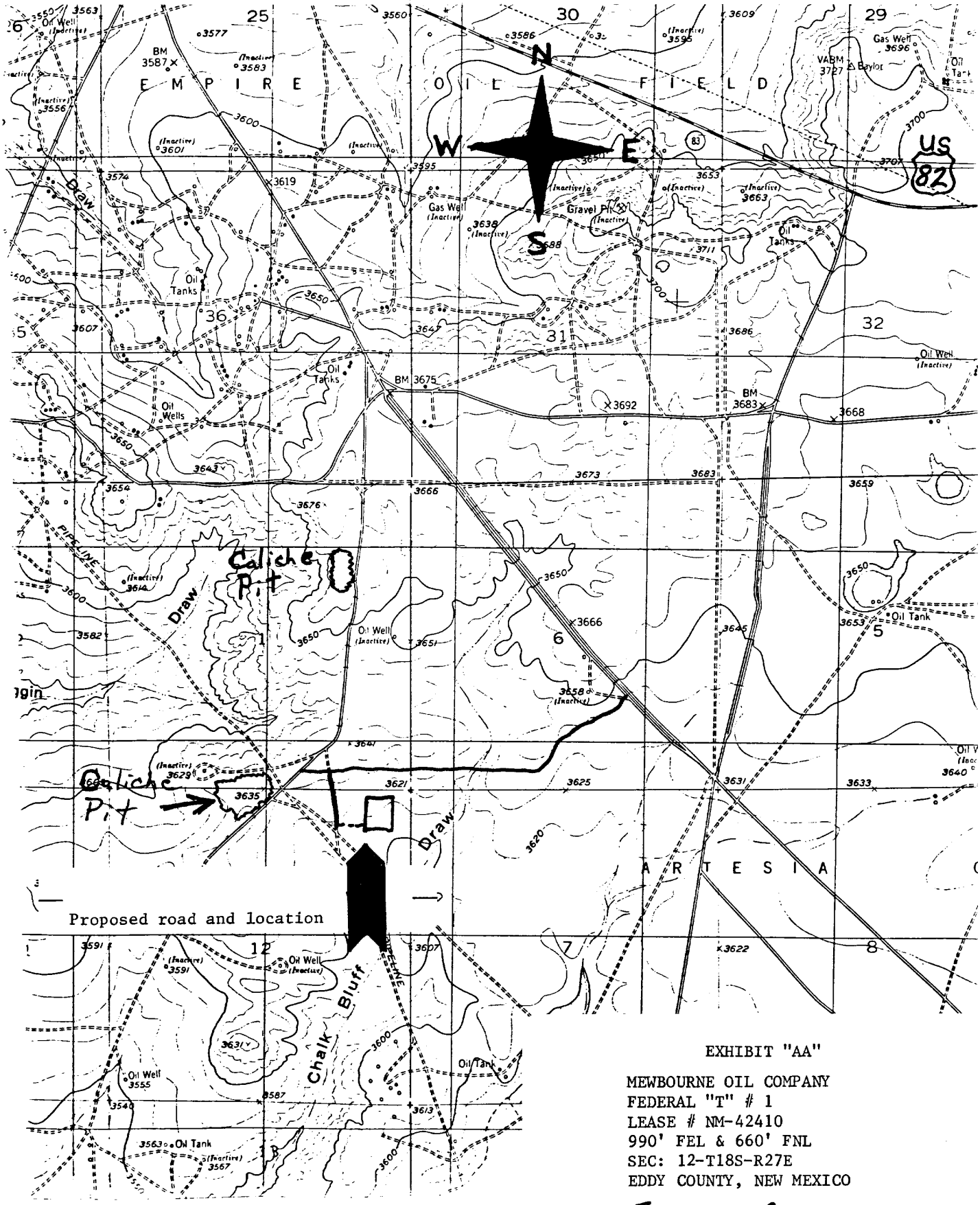


EXHIBIT "AA"

MEWBOURNE OIL COMPANY
FEDERAL "T" # 1
LEASE # NM-42410
990' FEL & 660' FNL
SEC: 12-T18S-R27E
EDDY COUNTY, NEW MEXICO

Existing Roads

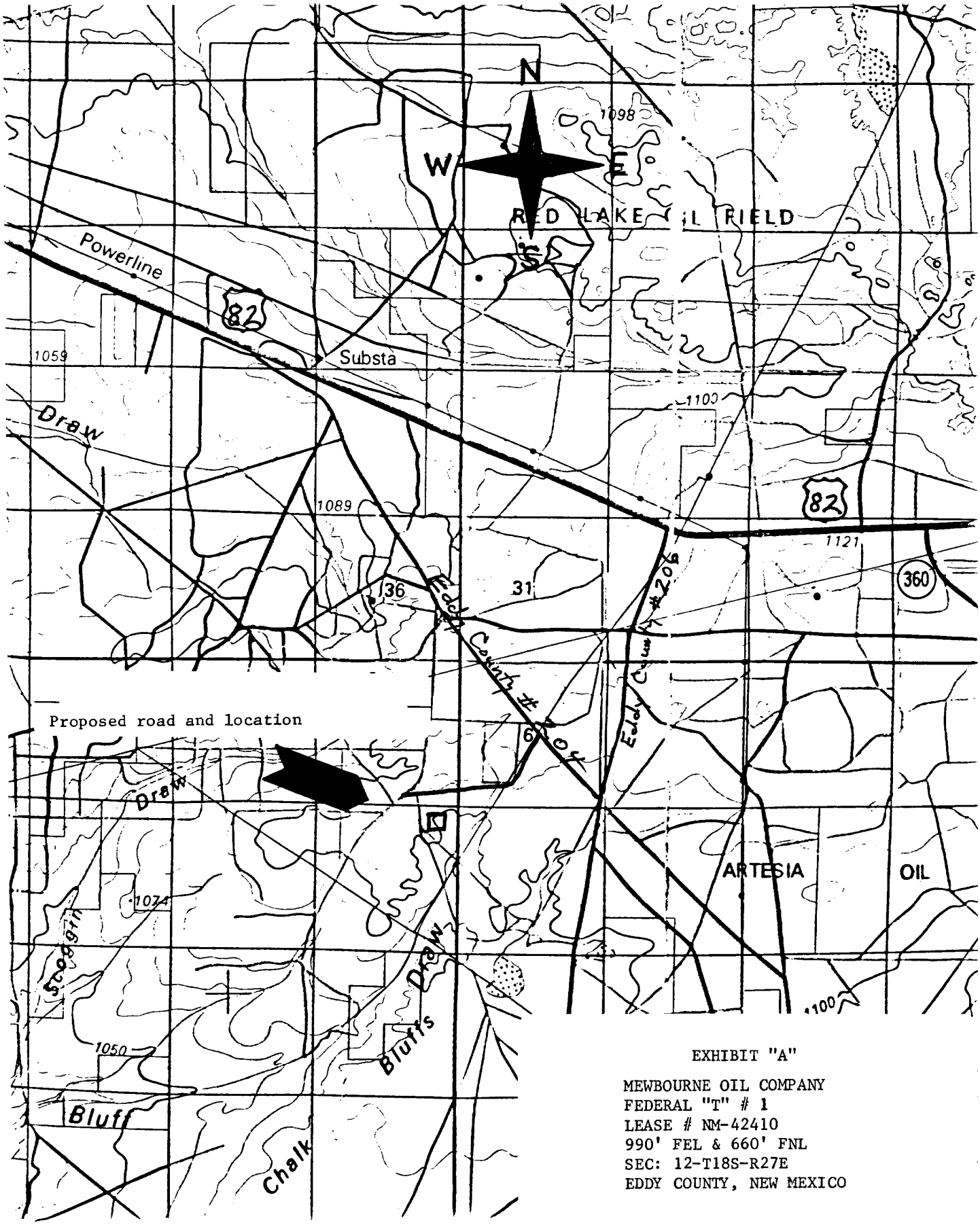


EXHIBIT "A"

MEWBOURNE OIL COMPANY
FEDERAL "T" # 1
LEASE # NM-42410
990' FEL & 660' FNL
SEC: 12-T18S-R27E
EDDY COUNTY, NEW MEXICO

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

May 3, 1990

Mewbourne Oil Company
c/o Hinkle, Cox, Eaton, Coffield & Hensley
500 Marquette, NW
Suite 800
Albuquerque, NM 87102-2121

Attention: James Bruce

Administrative Order NSL-2785

Dear Mr. Bruce:

Reference is made to your application on behalf of Mewbourne Oil Company dated April 12, 1990 for a non-standard gas well location for your Federal "T" Well No. 1 to be located 660 feet from the North line and 990 feet from the East line (Unit A) of Section 12, Township 18 South, Range 27 East, NMPM, Undesignated North Illinois Camp Morrow Gas Pool, Eddy County, New Mexico. The N/2 of said Section 12 shall be dedicated to the well forming a standard 320-acre gas spacing and proration unit for said pool.

By the authority granted me under the provisions of General Rule 104 (II) the above-described unorthodox gas well location is hereby approved.

Sincerely,

William J. LeMay
Director

WJL/MES/ag

cc: Oil Conservation Division - Artesia
US Bureau of Land Management - Carlsbad

12. CERTI ATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Mewbourne Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

For W.H. Cravey

Bill Price

May 18, 1990

Date

W.H. Cravey
Production Superintendent
Mewbourne Oil Company

10. OTHER I. ORMATION:

A. The geologic surface formation is hard clay interspersed with sand and chert outcroppings. Vegetative cover is generally sparse and consist mostly of greasewood and bear grass.

B. The estimated tops of geologic markers are as follows:

Queen	1260'	Cisco	7740'
San Anres	2100'	Canyon	8350'
Glorieta	3720'	Strawn	8900'
Tubb	4930'	Atoka	9500'
Abo	5900'	Morrow	9600'
Wolfcamp	6900'	Mississippian	10,100'

C. The estimated depths at which anticipated water, oil, or gas are expected to be encountered:

Water: Possible surface water between 100-300'.

Oil: Penrose @ 1520'.

Gas: Wolfcamp @ 6900'.

D. Proposed Casing Program: See Form 9-331C.

E. Pressure Control Equipment: See Form 9-331C and Exhibit "D".

F. Mud Program: See Form 9-331C.

G. Auxiliary Equipment: Mud-gas seperator and PVT aystem from 6,000' - T.D.

H. Testing and Coring Program: Possibility of 6 DST's in the following zones; Wolfcamp, Cisco, Canyon, Strawn, Atoka, and Morrow. No cores are planned at this time.

Logging: Gamma Ray - Spectral
Density - Dual Spaced Neutron Log; T.D. to surface.
Gamma Ray - Dual Latero Log
Microguard Log; T.D. to Intermediate casing.

I. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the weight.

J. Anticipated Starting Date: As soon as possible after BLM approval.

11. OPERATOR'S REPRESENTATIVE

The field representatives responsible for assuring compliance with the approved surface use and operations plan are as follows:

W.H. Cravey
Erick W. Nelson
Bill Pierce
701 South Cecil Street
Hobbs, New Mexico
Phone: (505) 393-5905

5. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche for surfacing the road and location hopefully will come from the construction site. In the event that unsuitable material is encountered, caliche will be taken from a BLM pit located in the NE4/NW4 of section 12-T18S-R27E, which would be BLM pit # 18271203. This pit also extends into the SE4/SW4 of section 1-T18S-R27E which would be BLM pit # 18270114. An alternate pit which may be used in the event BLM pit # 18271203 contains unsuitable material would be a BLM pit located in the SW4/NE4 of section 1-T18S-R27E, which would be BLM pit # 18270107.

6. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.

C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.

D. Current laws and regulations pertaining to the disposal of human water will be complied with.

E. All trash, junk and other waste material will be contained to prevent scattering and will be removed and deposited in an approved sanitary landfill.

F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.

7. ANCILLIARY FACILITIES:

A. None required.

8. WELLSITE LAYOUT:

A. Exhibit "C" shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pit, and location of major rig components.

B. The pad and pit area has been staked and flagged.

9. PLANS AND RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations all equipment and other material not needed for operations will be removed. Pits will be filled and location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as possible.

MULTI-POINT SURFACE USE AND OPERATING PLAN

MEWBOURNE OIL COMPANY

FEDERAL "T" WELL NO. 1

990' FEL & 660' FNL OF SEC. 12-T18S-R27E

EDDY COUNTY, NEW MEXICO

NEW MEXICO LEASE NO. NM-42410

This plan is submitted with the Application for Permit to Drill (APD) the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan and the magnitude of necessary surface disturbance involved, so that a complete appraisal can be made of the enviromental effects associated with the operation. The surface to be disturbed is privately owned and a surface use agreement has been signed with the land owner.

1. EXISTING ROADS:

   A. Exhibit "A" is a portion of a BLM map, 30 x 60 minute quadrangle; Artesia, New Mexico, showing the location of the proposed well as staked. From the junction of U.S. 82 and U.S. 285 Highways in Artesia, proceed east on U.S. 82 for 12 miles. Turn right (south) on Eddy County Road #206 (Illinois Camp Road) and proceed south for 1 3/4 miles. Turn right (west) on Eddy County Road #204 and proceed west for 3/10 of a mile. Turn left (south) on an existing caliche lease road and follow southwest for 7/8 of a mile. Turn left (south) and proceed 1/4 mile, turn left (east) into location.

   B. Culverts: None required.

   C. Cuts and Fills: A three foot cut will be required for construction of the location.

   D. Turn-Outs: None required.

   E. Gates and Cattleguards: None required.

2. LOCATION OF EXISTING WELLS:

   A. Existing wells in a 1 mile radius are shown of Exhibit "B".

3. LOCATION OF PROPOSED FACILITIES:

   A. If the well is productive, all production facilities will be constructed on the existing pad and no additional surface disturbance will occur.

4. LOCATION AND TYPE OF WATER SUPPLY:

   A. Water will be purchased and trucked to the wellsite over the existing and proposed roads shown on Exhibits "A" and "AA".

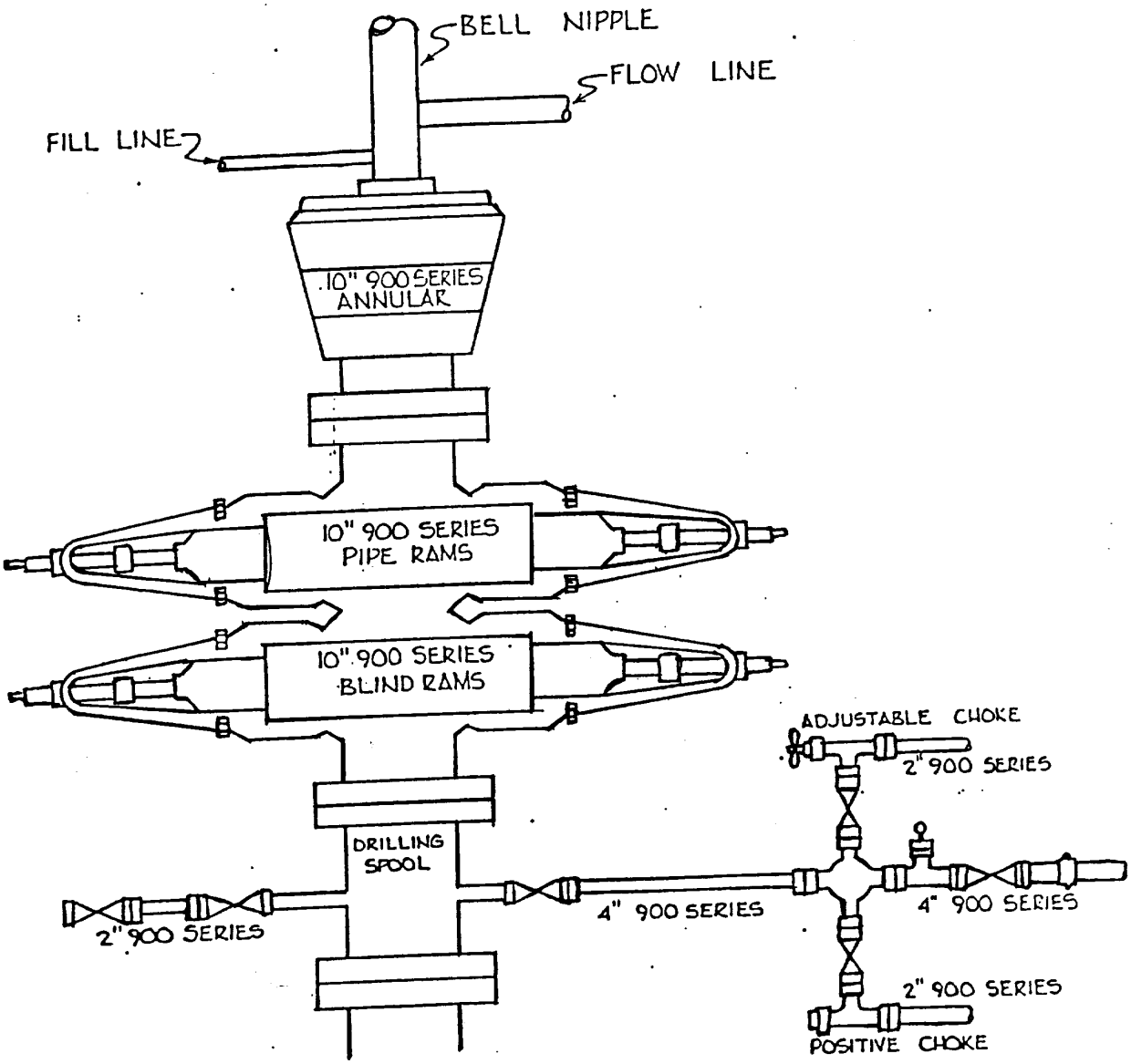


EXHIBIT "D"

MEWBOURNE OIL COMPANY
FEDERAL "T" # 1
LEASE # NM-42410
990' FEL & 660' FNL
SEC.12-T18S-R27E
EDDY COUNTY, NEW MEXICO

Submit to Appropriate District Office
State Lease - 4 copies
Fee Lease - 3 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised 1-1-89

RECEIVED
JUN 15 '90
O. C. D.
ARTESIA, OFFICE

WELL LOCATION AND ACREAGE DEDICATION PLAT
All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
MEWBOURNE OIL COMPANY	FEDERAL "T"	1

Unit Letter	Section	Township	Range	County
A	12	18 South	27 East NMPM	Eddy

Actual Footage Location of Well: 660 feet from the North line and 990 feet from the East line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3618.9	Morrow	North Illinois Camp Morrow	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

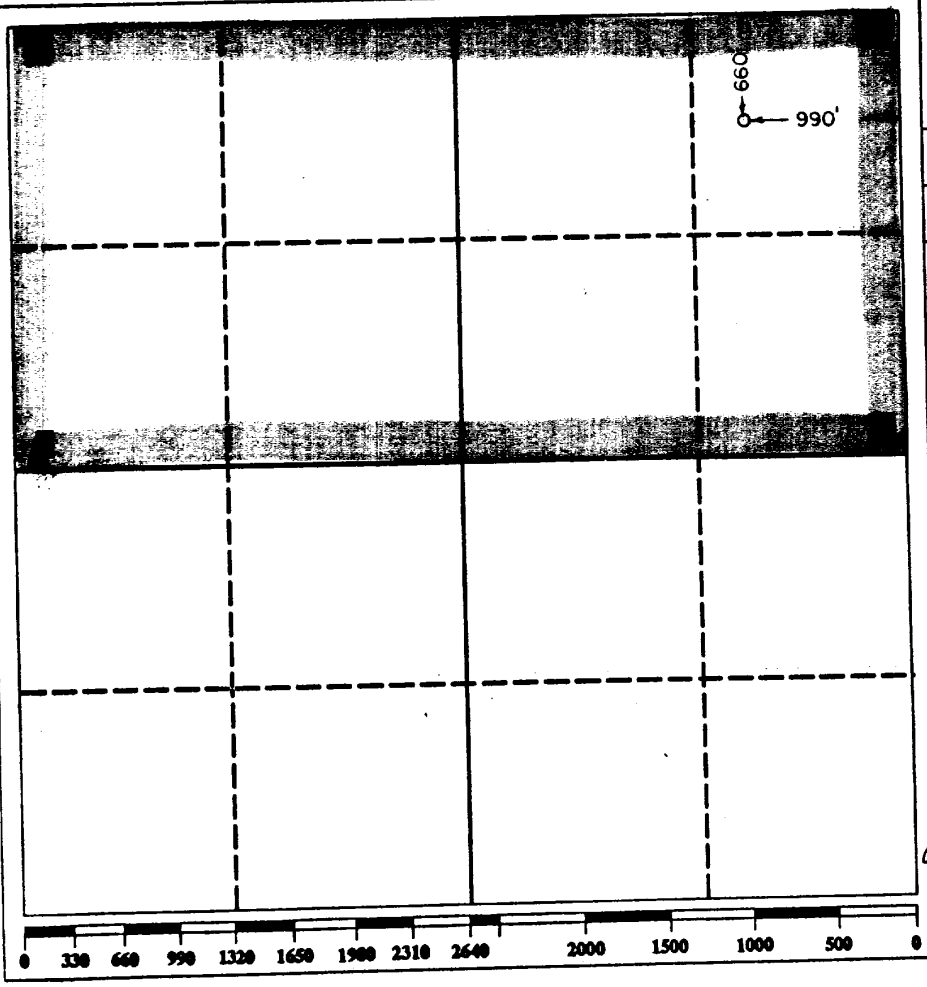
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☐ Yes ☐ No If answer is "yes" type of consolidation _____

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary. _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: W.H. Cravey

Printed Name: W.H. Cravey

Position: District Supt.

Company: Mewbourne Oil Company

Date: April 12, 1990

SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: 4/7/90

Signature & Seal of Professional Surveyor: Herschel L. Jones

STATE OF NEW MEXICO
HERSCHEL L. JONES
REGISTERED LAND SURVEYOR

Certificate No. 3640

30-015-26407

Form 3160-3
(November 1983)
(formerly 9-331C)

Drawer DD
Artesia, NM 88210

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM 42410

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: FEDERAL "T"

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: North Illinois Camp Morrow

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 12-T18S-R27E

12. COUNTY OR PARISH: EDDY

13. STATE: N. MEX.

1a. TYPE OF WORK: DRILL [XXX] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [XXX] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: MEWBOURNE OIL COMPANY

3. ADDRESS OF OPERATOR: Box 5270; Hobbs, New Mexico 88241

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 660' FNL & 990' FEL
At proposed prod. zone: SAME

Unit A

RECEIVED JUN 15 '90 O. C. D. ARTESIA, OFFICE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 8 miles southeast of Artesia, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 660'

16. NO. OF ACRES IN LEASE: 320

17. NO. OF ACRES ASSIGNED TO THIS WELL: 320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.:

19. PROPOSED DEPTH: 10,300'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3618.9' GR

22. APPROX. DATE WORK WILL START*: Upon BLM approval

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17½"	13 3/8"	61#	450'±	450 sks. Class C - Circulated
11"	8 5/8"	24# & 32#	2600'±	700 sks. Class C - Tie back into surf.
7 7/8"	5½"	17# & 20#	10,300' ±	600 sks. Class H

RECEIVED 6 55 AM '90

Mud Program :
0 - 450' Spud mud with fresh water gel and lime. LCM as needed.
450' - 2600' Fresh water gel and lime. LCM as needed.
2600' -8500' Cut brine with lime for pH control. WT. 9.2 - 9.6ppg, WL - NC. LCM as needed.
8500' - 10,300' Cut brine with Drispac, salt gel, lime, soda ash, and starch. WT. 9.2 - 9.6 ppg. WL 10 cc's or less. Raise weight accordingly if abnormal pressures are encountered.

Post ID-1
6-22-90
New Loc + API

BOP PROGRAM:

900 series BOP and Hydril on 13 3/8" surface casing and on 8 5/8" intermediate casing.

Gas is not dedicated.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. For W.H. Cravey

SIGNED Bill Pierce TITLE District Superintendent DATE 5/18/90

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY Orig. Signed by Richard L. Manus TITLE _____ DATE 6-13-90

CONDITIONS OF APPROVAL, IF ANY:
APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

NSL-2785 Appv. 5-3-90

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

ITEM 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR Part 3160.

PRINCIPAL PURPOSE: The information is to be used to process and evaluate your application for permit to drill, deepen, or plug back an oil or gas well.

ROUTINE USES: (1) The analysis of the applicant's proposal to discover and extract the Federal or Indian resources encountered. (2) The review of procedures and equipment and the projected impact on the land involved. (3) The evaluation of the effects of proposed operation on surface and subsurface water and other environmental impacts. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if the lessee elects to initiate drilling operation on an oil and gas lease.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications.

Response to this request is mandatory only if the lessee elects to initiate drilling operations on an oil and gas lease.

Form 3160-5
(November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

RECEIVED

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.
NM-42410

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

JUL 13 11:5 AM '90

1. OIL WELL [ ] GAS WELL [X] OTHER

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
Mewbourne Oil Company

RECEIVED

8. FARM OR LEASE NAME
FEDERAL "T"

3. ADDRESS OF OPERATOR
P. O. Box 7698, Tyler, Texas 75711

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
660' FNL & 990' FEL

JUL 18 '90
O. D.
ARTESIA, OFFICE

10. FIELD AND POOL, OR WILDCAT
North Illinois Camp Morrow

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
12-18S-27E

14. PERMIT NO.
API #30-015-26404

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3618.9' GR

12. COUNTY OR PARISH
Eddy

13. STATE
N.M.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[X]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			[ ]
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

6/29/90 - Spud at 12:15 PM 6/28/90.

Ran 15 joints 13-3/8" 68# New LT&C Casing set at 472' cemented with 100 sxs of Class "C" Thixad containing 3% $CaCl_2$ + 1/2#/sx Celloseal + 5#/Sx Gilsonite followed by 200 sxs of Class "C" containing 6% gel + 1/2# Celloseal + 5#/sx. Gilsonite + 3% $CaCl_2$ followed by 150 sxs of Class "C" Neet + 3% $CaCl_2$. Plug down at 6:12 AM 6/29/90. Circulated 50 sxs of cement. Insert float in collar of first joint did not hole. Left casing SI with 300#.

7/05/90 - Ran 58 jts 8-5/8" J-55 32# 8rd ST&C New LS set at 2589' cemented with 650 sxs Class "C" cement + 6.00% gel + 5# Gilsonite + 0.5# Cello-seal + 3% $CaCl_2$ followed by 250 sxs Class "C" + 2% $CaCl_2$. Plug down to 2543' with 1300# at 6:20 PM 7/04/90 with full returns. Float held OK. Circulated 50 sxs.

ACCEPTED FOR RECORD
JUL 1 6 1990
CARLSBAD, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Engr.Oprns. Secretary DATE 7/05/90

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 3160-5
(November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.
NM-42410

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals.)

RECEIVED
SEP 13 '90
O. C. D.
ARTESIA, OFFICE

1. OIL WELL [ ] GAS WELL [X] OTHER

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
Mewbourne Oil Company

8. FARM OR LEASE NAME
FEDERAL "T"

3. ADDRESS OF OPERATOR
P. O. Box 7698, Tyler, Texas 75711

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
660' FNL & 990' FEL

10. FIELD AND POOL, OR WILDCAT
N. Illinois Camp Morrow

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
12-18S-27E

14. PERMIT NO.
API #30-015-26404

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3618.9' FR

12. COUNTY OR PARISH
Eddy

13. STATE
N.M.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS: (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

8/12/90 - Ran 5-1/2" casing as follows: 237 jts N-80, 17#, LT&C Used Casing set at 9473', cemented with 430 sxs Class "H" + .7 CF-14 + 5# salt + ¼# Celloseal. Overdisplaced 1 bbl without bumping plug. No back flow or vacuum.

8/27/90 - Ran 4" liner set at 10,140' with top of liner at 9055'. Pumped 500 gallons Sure Bone, followed by 5 bbl fresh water. Spaced and cemented with 80 sacks Class "H" with 1% CF-14. Liner wiper plug down at 11:30 AM.

RECEIVED
SEP 10 '90 AM 11:31

SEP 11 1990

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Engr. Oprns. Secretary DATE 9/06/90

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 3160-5
(November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

RECEIVED

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.
NM-42410

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

OCT 9 10 41 AM '90
RECEIVED
CARL... AREA ... OFFICE

OCT 17 '90
O. C. D.
ARTESIA, OFFICE

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
Mewbourne Oil Company

8. FARM OR LEASE NAME
FEDERAL "T"

3. ADDRESS OF OPERATOR
P. O. Box 7698, Tyler, Texas 75711

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
660' FNL & 990' FEL

10. FIELD AND POOL, OR WILDCAT
N. Illinois Camp Morrow

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
12-18S-27E

14. PERMIT NO.
API #30-015-26404

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3618.9' GR

12. COUNTY OR PARISH
Eddy

13. STATE
N.M.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF		PULL OR ALTER CASING		WATER SHUT-OFF		REPAIRING WELL	
FRACTURE TREAT		MULTIPLE COMPLETE		FRACTURE TREATMENT	X	ALTERING CASING	
SHOOT OR ACIDIZE		ABANDON*		SHOOTING OR ACIDIZING	X	ABANDONMENT*	
REPAIR WELL		CHANGE PLANS		(Other)			
(Other)							

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

9/14/90 - Perforated Morrow 10,008-014', 12 holes; 10,038-054', 36 holes. Total 48 holes 24'.

9/15/90 - Halliburton broke down perfs with 2000 gals 7½% Morflo B.C. acid containing 1000 SCF/Bbl N_2 carrying 96 ball sealers and flushed with 23 bbls 2% KCL water containing 1000 SCF/Bbl N_2. Pressured casing to 1000#. Had good ball action. ISDP 5050#. In 5 mins., 4580#, In 10 mins, 4300#, In 15 mins, 4130#. Max 6000#. Max Rate 3.7 BPM. Avg 5850#. Avg Rate 3.4 BPM. 71 Bbls load to recover.

9/26/90 - Halliburton frac'd Morrow perfs with 8900 gals gelled 2% KCL water + 87 tons of CO_2 carrying 11,500# 20/40 Interprop. Pressured annulus to 2000#. ISDP 5340#. In 5 mins 5080#, in 10 mins 4950#, in 15 mins 4850#. Avg 9500#. Avg rate 6 BPM. Max 9800#. Max rate 6.7 BPM. 211 bbls load to recover.

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Engr. Oprns. Secretary DATE 10/02/90

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

KEN REYNOLDS—PRESIDENT
ARNIE NEWKIRK—VICE-PRESIDENT

WEK DRILLING CO., INC. — OIL WELL DRILLING CONTRACTORS

P. O. Box 1498 ROSWELL, NEW MEXICO 88202-1498
505/623-5070 ROSWELL, NM
505/746-2719 ARTESIA, NM

RECEIVED
JAN 31 1991
O. C. D.
ARTESIA, OFFICE

August 29, 1990

Mewbourne Oil Co., Inc.
P.O. Box 5270
Hobbs, NM 88241

Ref: Federal "T" #1

Gentlement:

The following is a Deviation Survey on the above referenced well located in Eddy County, New Mexico.

472' - ¼°	4062' - ½°	6841' - 3¼°
840' - 1°	4560' - ½°	6934' - 3½°
1380' - ½°	5048' - 0°	7026' - 2 3/4°
1759' - ¼°	5546' - 3/4°	7148' - 2 3/4°
2253' - 3/4°	5950' - 1¼°	7272' - 2°
2589' - ¼°	6479' - 3 3/4°	8137' - 2°
3068' - ½°	6564' - 4½°	8815' - 2°
3567' - ¼°	6626' - 4¼°	9470' - 1 3/4°
		10141' - TD

Sincerely,
Arnold Newkirk
Arnold Newkirk
Vice-President

STATE OF NEW MEXICO)
)
COUNTY OF CHAVES)

The foregoing was acknowledged before me on this 29th day of August 1990 by Arnold Newkirk.

My Commission Expires:

10-07-1992

Linda Rogers
Notary Public

SHIPPED AUG 31 1990

N. M. OIL CONSERVATION
P. O. BOX 1980
HOBBS, NEW MEXICO 88240

CONFIDENTIAL

Form 3160-4
(November 1983)
(formerly 9-330)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

BUREAU OF LAND MANAGEMENT RECEIVED OCT 30 1990 CARLSBAD, NEW MEXICO

5. LEASE DESIGNATION AND SERIAL NO.: NM-42410

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: FEDERAL "T"

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: North Illinois Camp Morrow

2. NAME OF OPERATOR: Mewbourne Oil Company

3. ADDRESS OF OPERATOR: P. O. Box 7698, Tyler, Texas 75711

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 660' FNL & 990' FEL
At top prod. interval reported below:
At total depth: Same

RECEIVED SEP 24 1991 O. C. D. ARTESIA, OFFICE

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 12-18S-27E

API #30-015-26404 — DATE ISSUED

12. COUNTY OR PARISH: Eddy
13. STATE: N.M.

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
6/28/90	8/25/90	9/13/90	KB 3634', DF 3632', GL 3618'	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
10,141'	10,100'		→	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 10,008-054' Morrow

25. WAS DIRECTIONAL SURVEY MADE: Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN: DLL-MGRD, SDL-DSN

27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	68#	472'	17-1/2"	450 sacks - Circ	None
8-5/8"	32#	2589'	12-1/4"	900 sacks - Circ	None
5-1/2"	17#	9473'	7-7/8"	430 sacks - Circ	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
4"	9055'	10,141'	80	

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	9842'	8888'

31. PERFORATION RECORD (Interval, size and number)
10,008-014', 12 holes)
10,038-054', 36 holes) 24'

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
10,008-054'	2000 gals 7½% acid. Frac'd w/ 8900 gals 2% KCL wtr + 87 tons CO_2 + 11,500# 20/40 Interprop.

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
9/15/90	Flowing	Shut-in WOPL

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10/03/90	24 hrs.	34/64"	→	1 BC	923	2	923:1

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
160#	0#	→	1 BC	923	2	58.0°

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): Vented

TEST WITNESSED BY: Eric Nelson

35. LIST OF ATTACHMENTS: Logs

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Daylene Thompson TITLE Engr. Oprns. Secretary DATE 10/25/90

*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Penrose	1522'	1556'	Sandstone
Atoka	9566'	9575'	Sandstone
Middle Morrow	9902'	9928'	Sandstone
Lower Morrow	10008'	10054'	Sandstone
DST #1 Drinkard	5749'	5850'	No cushion. Tool open 30 mins. IFP 88-45#, ISIP 296#. 62 mins. FFP 88-50#. FSIP 430#. 120 mins. Recovered 30' drilling fluid.
DST #2 Abo	6475'	6499'	No cushion. Tool open 30 mins. IFP 72-37#. ISIP 1953#. 60 mins. FFP 59-59# 60 mins. FSIP 1894#. 120 mins. Recovered 2' free oil, 122' drilling fluid.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Yates	476'	
Queen	1218'	
Grayburg	1572'	
San Andres	2072'	
Tubb	4824'	
Abo	6016'	
Wolfcamp	6716'	
Cisco	7682'	
Strawn	8912'	
Atoka	9513'	
Morrow	9628'	
Morrow Clastics	9828'	
Lower Morrow	9965'	
Barnett	10104'	

Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-104
Revised 1-1-89
See Instructions
at Bottom of Page

RECEIVED
JAN 31 1991
O. C. D.
ARTESIA, OFFICE

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator	Well API No.
Mewbourne Oil Company ✓	30-015-26404

Address: P. O. Box 7698, Tyler, Texas 75711

Reason(s) for Filing (Check proper box): New Well [X]; Recompletion [ ]; Change in Operator [ ]; Other (Please explain) [ ]

Change in Transporter of: Oil [ ] Dry Gas [ ]; Casinghead Gas [ ] Condensate [ ]

If change of operator give name and address of previous operator _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
FEDERAL "T"	1	North Illinois Camp Morrow	State, Federal or Fee	NM-42410

Location: Unit Letter A : 660 Feet From The North Line and 990 Feet From The East Line

Section 12 Township 18S Range 27E, NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil or Condensate	Address (Give address to which approved copy of this form is to be sent)
Amoco Pipeline Inter-corporate Trucking [ ] [X]	Oil Tender Dept. Box 702068, Tulsa, OK 74170-2068
Name of Authorized Transporter of Casinghead Gas or Dry Gas	Address (Give address to which approved copy of this form is to be sent)
Transwestern Pipeline Company [ ] [X]	P. O. Box 1188, Houston, Texas 77251-1188

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When ?
	A	12	18S	27E	No	February, 1991

If this production is commingled with that from any other lease or pool, give commingling order number: No

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
		X	X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
6/28/90	9/13/90	10,141'	10,100'
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
DF 3632', GL 3618'	Morrow	10,008'	9,842'
Perforations			**Depth Casing Shoe**
10,008-054'			---

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17-1/2"	13-3/8"	472'	450
12-1/4"	8-5/8"	2589'	900
7-7/8"	5-1/2"	9473'	430
5-1/2"	4" Liner	10140'	80

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL *(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)*

Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
			Post ID-2
Length of Test	**Tubing Pressure**	**Casing Pressure**	**Choke Size** 3-15-91
Actual Prod. During Test	**Oil - Bbls.**	**Water - Bbls.**	**Gas- MCF** Comp + BK

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
923	24 hours	1	58°
Testing Method (pitot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
Back Pressure	2300#	---	34/64"

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Gaylon Thompson
Signature
Gaylon Thompson, Engr. Oprns.Sec.
Printed Name Title

OIL CONSERVATION DIVISION

Date Approved MAR 12 1991

By Mike Williams

Title SUPERVISOR, DISTRICT II

Printed Name	Title	Title SUPERVISOR, DISTRICT II
1/28/91	(903) 561-2900	
Date	Telephone No.	

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
2) All sections of this form must be filled out for allowable on new and recompleted wells.
3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
4) Separate Form C-104 must be filed for each pool in multiply completed wells.

c/s' F/e

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RECEIVED

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special		Test Date: 10-11-90	
Company: Mewbourne Oil Company	Connection: Vented		
Pool: North Illinois Comp Morrow	Formation: Morrow		Unit: A
Completion Date: 09-13-90	Total Depth: 10141	Plug Back TD: 10100	Elevation: 3634 KB
Farm or Lease Name: Federal T			
Csg. Size: 4"	Wt.: 10.46	d:	Set At: 10141
Perforations: From 10008 To 10054			Well No.: 1
Thg. Size: 2 3/8	Wt.: 4.7	d:	Set At: 9842
Perforations: From OPEN To END			Unit: A Sec.: 12 Twp.: 18S Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 8888	County: Eddy
Producing Thru: TBG	Reservoir Temp. °F: 174 @ 10031	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2
State: New Mexico			

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10031	10031	.656	2.293	.39	---		2.067	Flg.

FLOW DATA						TUBING DATA		CASING DATA		
NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						2745		PKR		72 hrs
1.	2	X 1.250	67	12.96	56	2590		PKR		1 hr.
2.	2	X 1.250	167	14.44	50	2470		PKR		1 hr.
3.	2	X 1.250	179	65.61	47	2110		PKR		1 hr.
4.	2	X 1.250	299	94.09	54	1630		PKR		1 hr.
5.										

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	8.120	32.24	80.2	1.004	1.235	1.010	328
2.	8.120	51.01	180.2	1.010	1.235	1.020	527
3.	8.120	112.30	192.2	1.013	1.235	1.021	1165
4.	8.120	171.39	312.2	1.006	1.235	1.036	1791
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.12	516	1.38	.981
2.	.26	510	1.37	.962
3.	.28	507	1.36	.959
4.	.46	514	1.38	.932
5.				

Gas Liquid Hydrocarbon Ratio 61.2 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 58.0 @ 60° Deg.
Specific Gravity Separator Gas .656 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure *678 P.S.I.A. P.S.I.A.
Critical Temperature *372 R R

P_c 2817.3 P_c^2 7937.2

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2696.2	7269.5	667.7
2		2555.8	6532.1	1405.1
3		2173.1	4722.4	3214.8
4		1689.2	2853.4	5083.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 1.561 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.521

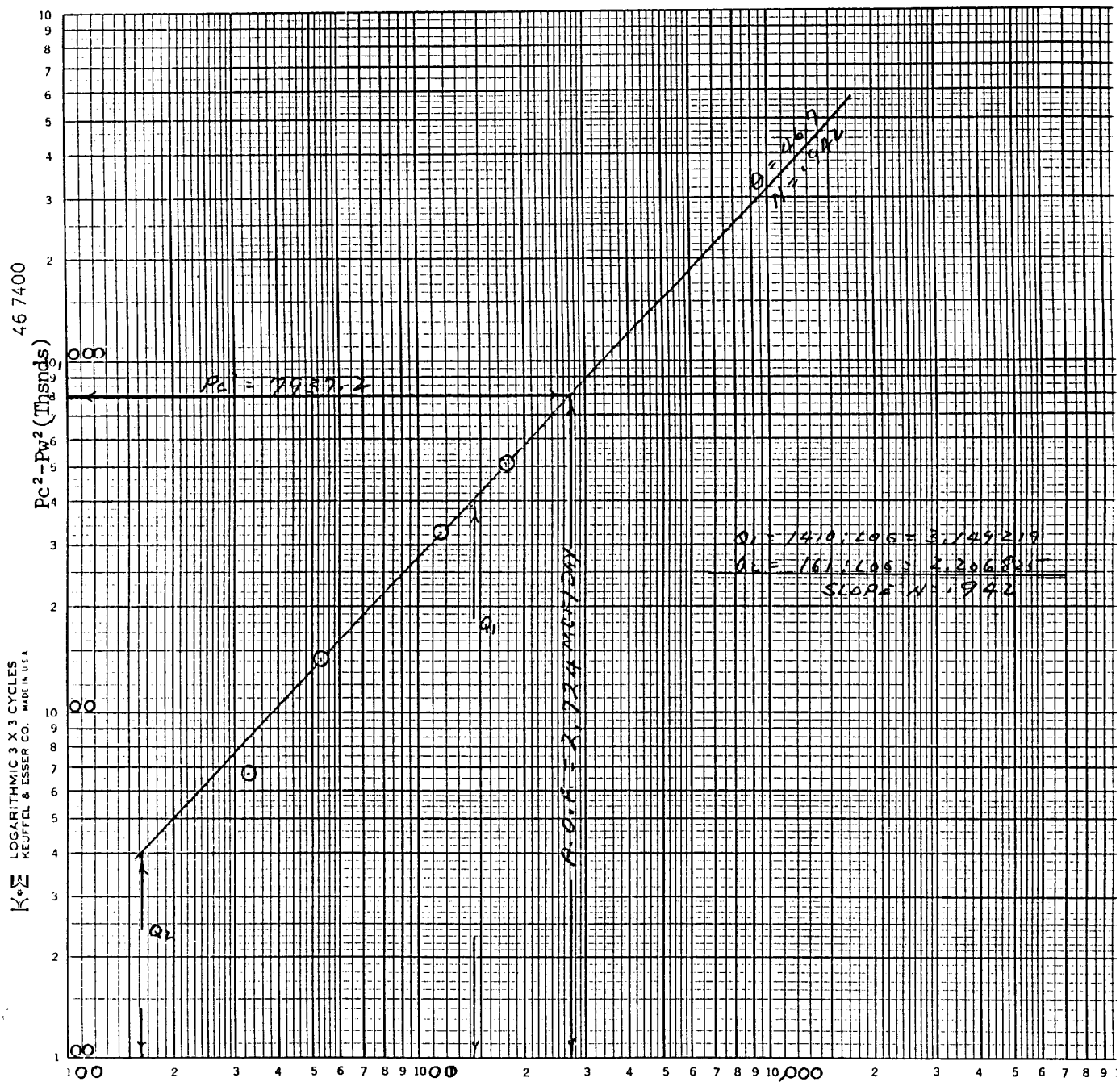
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 2.724

Absolute Open Flow 2,724 Mcfd @ 15.025 Angle of Slope θ 46.7 Slope, n .942

Remarks: *=corrected to 2.293% CO_2 & .39% N2
Well made 2.6 BBLS 58.0 API CONDENSATE during test & .5 BBL H^2O

Approved By Division | Conducted By: | Calculated By: | Checked By:

Mewbourne Oil Company
Federal T, Well #1
Eddy County, New Mexico
12 - 18S - 27E
10-11-90



Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-104
Revised 1-1-89
See Instructions
at Bottom of Page

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator	Well API No.
Mewbourne Oil Company	30-015-26404
Address: P.O. Box 5270 Hobbs, New Mexico	

Reason(s) for Filing *(Check proper box)*

- New Well [X]
- Recompletion [ ]
- Change in Operator [ ]
- Change in Transporter of: Oil [ ] Dry Gas [ ] Casinghead Gas [ ] Condensate [ ]
- Other *(Please explain)* [ ]

If change of operator give name and address of previous operator _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Federal "T"	1	North Illinois Camp Morrow	State, Federal or Fee	NM-42410

Location: Unit Letter A : 660 Feet From The North Line and 990 Feet From The East Line

Section 12 Township 18S Range 27E, NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [ ] or Condensate [X]: Amoco Pipeline Inter-corporate Trucking	Address *(Give address to which approved copy of this form is to be sent)*: Oil Tender Dept. Box 702068 Tulsa, Ok 74170-2068
Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [X]: Transwestern Pipeline Company	Address *(Give address to which approved copy of this form is to be sent)*: P.O. Box 1188 Houston, Texas 77251-1188

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When ?
	A	12	18S	27E	Yes	02/07/91

If this production is commingled with that from any other lease or pool, give commingling order number: No

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
Elevations *(DF, RKB, RT, GR, etc.)*	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
Perforations			Depth Casing Shoe

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL *(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)*

Date First New Oil Run To Tank	Date of Test	Producing Method *(Flow, pump, gas lift, etc.)*	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas- MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method *(pitot, back pr.)*	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

W H Cravey
Signature

W.H. Cravey — District Supt.
Printed Name — Title

OIL CONSERVATION DIVISION

Date Approved MAR 12 1991

By ORIGINAL SIGNED BY MIKE WILLIAMS
Title SUPERVISOR DISTRICT II

Printed Name

Date 02/18/91

(505) 393-5905
Telephone No.

Title SUPERVISOR, DISTRICT II

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
2) All sections of this form must be filled out for allowable on new and recompleted wells.
3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
4) Separate Form C-104 must be filed for each pool in multiply completed wells.

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
ARTESIA DISTRICT OFFICE

BRUCE KING
GOVERNOR

P.O. DRAWER DD
ARTESIA, NEW MEXICO 88211
(505) 748-1283

Date: August 9, 1991

Mewbourne Oil Co.
P.O. Box 5270
Hobbs, N.M. 88241

Re: Wells placed in pool~~s~~

Gentlemen:
As the result of Division Order R-9545 the following described well (s) ~~(has~~ have) been placed in the pool ~~(s)~~ shown below. This change in nomenclature has been made in our files. Please change your records to reflect the proper pool name. All subsequent reports must show this nomenclature until further notice.

North Illinois Camp- Morrow Gas Pool - 78890

Federal T #1 A-12-18-27
Chalk Bluff Fed. Com. #1 N-1-18-27

Transporters are advised, by copy of this letter, to change their records to reflect the pool name as established by this order, effective July 1, 1991.

Sincerely,

Darrell Moore

Darrell Moore
District Geologist

cc: Each Transporter Amoco Pipeline, Transwestern
Santa Fe
Mae
Well File
Joe Chism
BLM

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NM-42410

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

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AUG - 2 1993
O.C.D.

7. If Unit or CA, Agreement Designation

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
Federal "T" No. 1

2. Name of Operator
Mewbourne Oil Company

9. API Well No.

3. Address and Telephone No.
P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905

10. Field and Pool, or Exploratory Area
Canyon

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
660' FNL & 990' FEL
Sec. 12-T18S-R27E

11. County or Parish, State
Eddy Co., N.M.

12. **CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
	[ ] Recompletion	[ ] New Construction
[ ] Subsequent Report	[X] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
[ ] Final Abandonment Notice	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

1. Plug back existing perforations (10,008'-10,054') with a CIBP @ 9950' and 9040'. Cap both plugs with 50' cement.
2. Perforate the Cisco formation @ 7700'-8050'.
3. Stimulate if necessary.

BUREAU OF LAND MANAGEMENT
RECEIVED
JUL 16 1993
DIST. 6 N.M.
Carlsbad, New Mexico

Procedure per conversation with Adam S. on June 23, 1993.

14. I hereby certify that the foregoing is true and correct

Signed _____ Title District Supt. Date July 14, 1993

(This space for Federal or State office use)

Approved by (ORIG. SGD.) DAVID R. GLASS Title Petroleum Engineer Date JUL 2 1993

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

c/SF

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

Form 3160-5
(June 1990)

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SEP 10 AM '93

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

RECEIVED
OCT - 6 1993
O. C. D.

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-42410
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 660' FNL & 990' FEL Sec. 12-T18S-R27E
8. Well Name and No.: Federal "T" #1
9. API Well No.: 30-015-26404
10. Field and Pool, or Exploratory Area: North Illinois Camp Morrow
11. County or Parish, State: Eddy Co. New Mexico

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☒ Subsequent Report	☒ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

* Verbal from Adam Salameh

08/14/93 Well pumping 1442 BW. 0 BO, 0 MCF from attempted completion in Cisco formation. MIRU well service rig.
08/15/93 Set CIBP @ 7595' over Cisco Perfs (7685'-7695'). Dump 4 sx. cmt. on plug. Perf. Wolfcamp formation (7330'-7360') (44 H)
08/16/93 Swabbed well down w/no entry.
08/17/93 Acidized Wolfcamp formation w/3000 gal 15% FE acid. Swabbed water w/no show of oil or gas.
08/18/93 Set CIBP @ 7300' over Wolfcamp formation (7330'-7360'). Dump 4 sx. cmt. on plug. Perf'd Wolfcamp formation (7092'-7146') (62H). Swabbed well down. No entry.
08/19/93 Acidized Wolfcamp formation (7092'-7146') w/3000 gal. 15% FE acid.
08/20/93 Swabbed well w/no show of oil or gas.
08/21/93 Set CIBP @ 7078' over Perfs (7092'-7146'). Perf'd Wolfcamp (6868'-7038') (80H)
08/22/93 Acidized Wolfcamp formation (6868'-7038') w/3000 gal. 15% FE acid.
08/24/93 Swabbing water w/trace of oil.
08/26/93 Acid frac'd Wolfcamp (6868'-7038') w/3000 gal. 20% FE acid & 15,000 gal. gel water. See attached page.

14. I hereby certify that the foregoing is true and correct

Signed [signature] Title Production Engineer Date 09/08/93

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

ACCEPTED FOR RECORD
L. Sara
OCT - 4 1993
CARLSBAD, NEW MEXICO

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

08/27/93	RIH w/pump & started pumping well.		
08/28/93	0 BO	276 BW	8 MCF
09/03/93	5 BO	30 BW	5 MCF
09/05/93	2 BO	25 BW	4 MCF

c/SY

Form 3160-5 (June 1990)

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

AUG 24 11 03 AM '93

CARLSBAD AREA

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

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SEP - 8 1993
O.C.D.

5. Lease Designation and Serial No.: NM-42410

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other

2. Name of Operator: Mewbourne Oil Company

3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 660' FNL & 990' FEL Sec. 12-T18S-R27E

8. Well Name and No.: Federal "T" #1

9. API Well No.: 30-015-26404

10. Field and Pool, or Exploratory Area: North Illinois Camp Morrow

11. County or Parish, State: Eddy Co. N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
	[ ] Recompletion	[ ] New Construction
[X] Subsequent Report	[X] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
[ ] Final Abandonment Notice	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)* Verball from Adam - BLM.

07/19/93 Set 4" CIBP @ 9950' over Morrow Perfs. (10,008'-10,054') Dump 2 sx. cmt.
07/21/93 Set 5-1/2" CIBP @ 9040' @ top of liner. Dumped 4 sx. cmt.
07/22/92 Perf. Cisco Formation (8034'-8042' w/2 SPF & 8055'-8060' w/2SPF. Swabbed tested all water.
07/24/93 Set cmt. retainer @ 8000'. Pumped 100 sx. cmt. into perfs. (8034'-8060')
07/25/93 Perf. Cisco Formation 7832'-7840' w/2 SPF. Swab tested all water.
07/27/93 Set cmt. retainer @ 7820'. Pumped 100 sx. cmt. into perfs. (7832'-7840')
07/28/93 Perf. Cisco Formation 7790'-7798' w/2 SPF. Swab tested all water.
07/29/93 Set cmt. retainer @ 7780'. Pumped 100 sx. cmt. into perfs. (7790'-7798')
07/30/93 Perf. Cisco Formation 7760'-7768' w/2 SPF. Swab tested all water.
07/31/93 Set cmt. retainer @ 7745'. Pumped 100 sx. cmt. into perfs. (7760'-7768')
08/01/93 Perf. Cisco Formation 7685'-7695' w/4 SPF. Swab tested water w/show of gas.
08/03/93 Acidized Cisco Formation (7685'-7695') w/3000 gal 15% FE acid.
08/04/93 RIH w/tbg. pump to 5033' & started pumping well.
08/05/93 1100 BWPD No oil.
08/06/93 1200 BWPD No oil.

14. I hereby certify that the foregoing is true and correct

Signed Kathy Freeman Title Engineer Date August 20, 1993

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

L. Lara

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-104
Revised 1-1-89
See Instructions at Bottom of Page

RECEIVED
OCT - 4 1993
O. C. D.

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator	Well API No.
MEWBOURNE OIL COMPANY	30-015-26404

Address: P.O. BOX 5270, HOBBS, NM 88241

Reason(s) for Filing (Check proper box)
- New Well [ ]
- Recompletion [ ]
- Change in Operator [ ]
- Other (Please explain) [ ]

Change in Transporter of:
- Oil [ ] Dry Gas [ ]
- Casinghead Gas [X] Condensate [ ]

If change of operator give name and address of previous operator _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease (State, Federal or Fee)	Lease No.
FEDERAL "T"	1	NORTH ILLINOIS CAMP, ~~WOLFCAMP~~ Morrow		NM-42410

Location
Unit Letter A : 660' Feet From The FNL Line and 990' Feet From The FEL Line

Section 12 Township 18S Range 27E, NMPM, EDDY County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [X] or Condensate [ ]	Address (Give address to which approved copy of this form is to be sent)
AMC	
Name of Authorized Transporter of Casinghead Gas [X] or Dry Gas [ ]	Address (Give address to which approved copy of this form is to be sent)
GPM GAS CORPORATION	BARTLESVILLE, OKLAHOMA 74004

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When ?
		12	18S	27E	YES	8-1-93

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
Perforations			Depth Casing Shoe

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas- MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pitot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature
JAY PRUDHOMME — PRODUCTION ENGINEER
Printed Name — Title

OIL CONSERVATION DIVISION

Date Approved OCT - 7 1993

By ORIGINAL SIGNED BY MIKE WILLIAMS

Title SUPERVISOR, DISTRICT II

SEPT. 28, 1993 (505) 393-5905

Date Telephone No.

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
2) All sections of this form must be filled out for allowable on new and recompleted wells.
3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
4) Separate Form C-104 must be filed for each pool in multiply completed wells.

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NM-42410

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

RECEIVED
OCT 20 1993
O.C.D.

7. If Unit or CA, Agreement Designation

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
Federal "T" #1

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-015-26404

3. Address and Telephone No.
P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905

10. Field and Pool, or Exploratory Area
North Illinois Camp Morrow

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
660' FNL & 990' FEL
Sec. 12-T18S-R27E

11. County or Parish, State
Eddy Co. N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
	☐ Recompletion	☐ New Construction
☐ Subsequent Report	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
☐ Final Abandonment Notice	☐ Altering Casing	☐ Conversion to Injection
	☐ Other Shut-in Status	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Mewbourne Oil Company here by requests "shut-in" status pending further evaluation of the lease for the above well. The well was spudded 06/28/90. Attached is a copy of the stimulation report which charts the annulus pressure during a break down on the Wolfcamp reompletion.

SEP 21 11 49 AM '93

Approved For 12 Month Period
Ending 8/27/94

14. I hereby certify that the foregoing is true and correct
Signed [signature] Title Production Engineer Date 09/21/93

(This space for Federal or State office use)
Approved by [signature] Title Petroleum Engineer Date 10/18/93
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

HALLIBURTON SERVICES

ACQUIRE Version 1.52

CUSTOMER AND JOB INFORMATION

Customer	MEWBOURNE OIL	Date	21-Aug-1993
Contractor	X-PERT	County	EDDY
Lease	FED-T	Town	
Location	ARTESIA	Section	
Formation		Range	
Job Type	ACID	Permit No	
Country	USA	Well No	1
State	NM	Field Name	

Customer Representative BRENT THURMAP Halliburton Operator TOMMY VAUGHN Ticket No. 498331NO

STAGE DESCRIPTIONS

ST ACID
ST FLUSH

WELL CONFIGURATION INFORMATION

Packer Type COMP Depth 6765 ft
Bottom Hole Temp. 120.0 Deg F

PIPE CONFIGURATION

Wellbore Segment Number	Measured Depth (ft)	TVD (ft)	Casing ID (inch)	Casing OD (inch)	Tubing ID (inch)	Tubing OD (inch)
1	6868	6868	4.950	5.500	2.441	2.875

PERFORATIONS

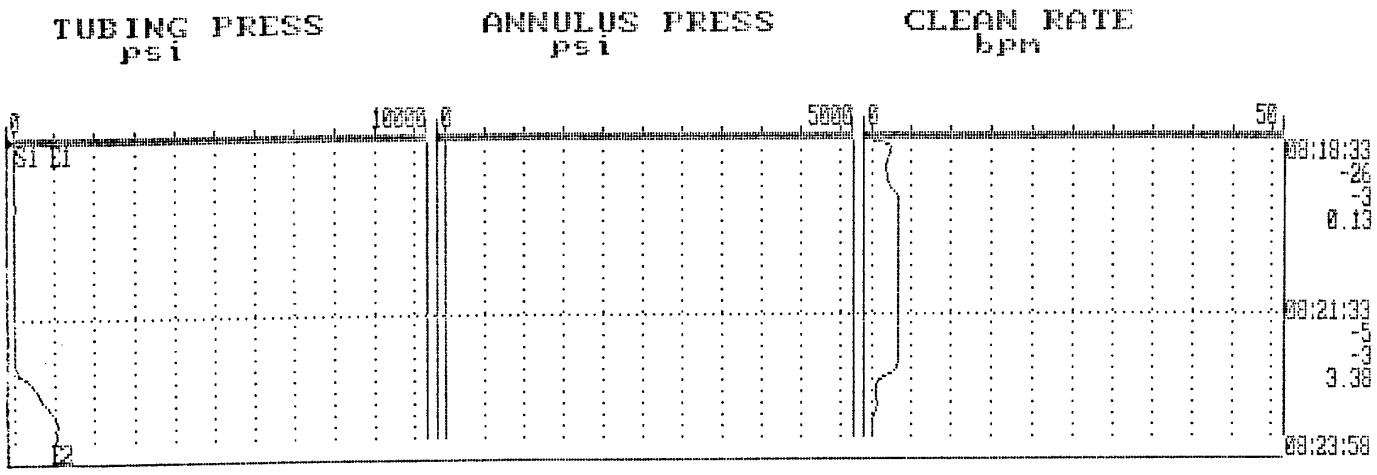
Perforation Interval	Top (ft)	Bottom (ft)	Shots per (ft)
1	6868	7038	2

REMARKS ABOUT JOB

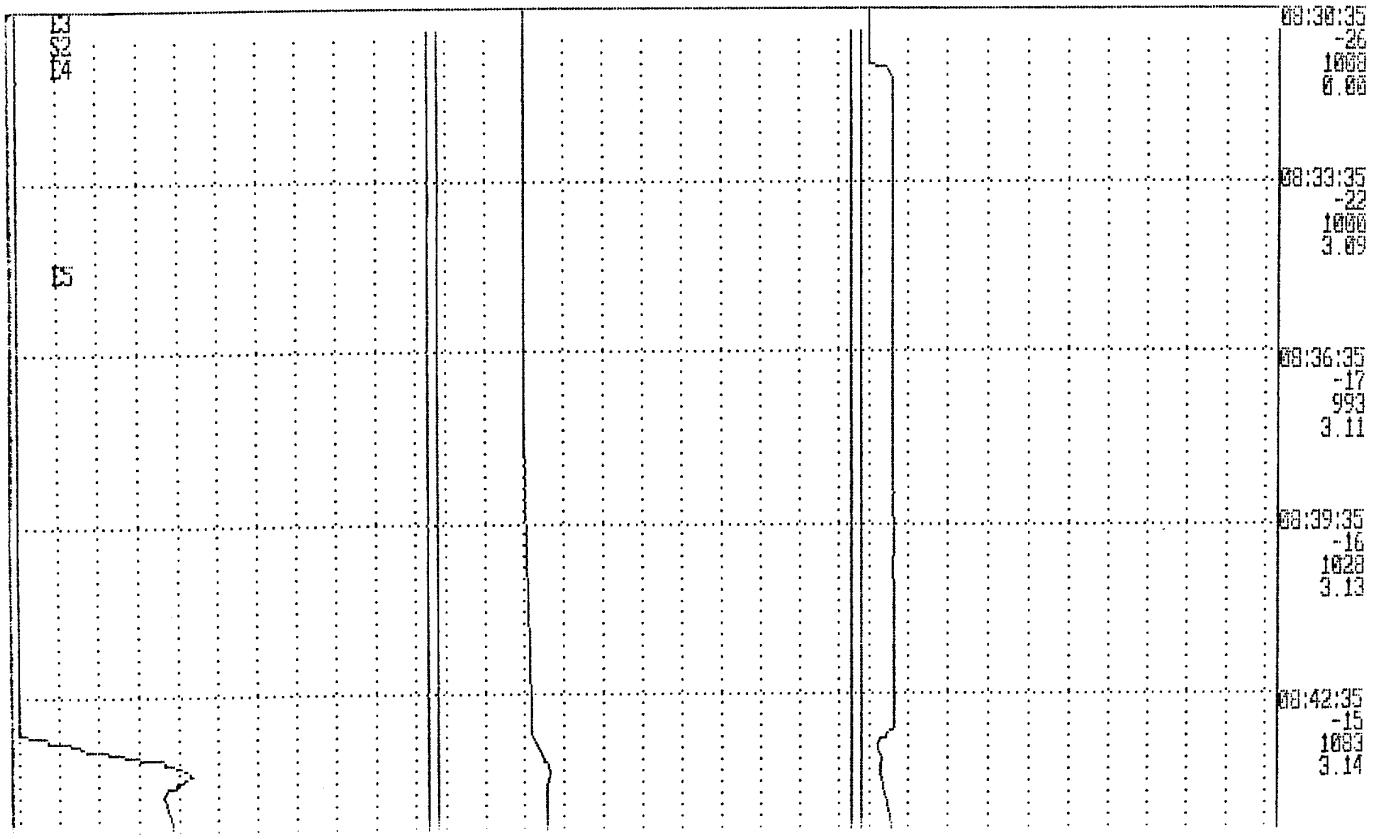
TREAT AS INST

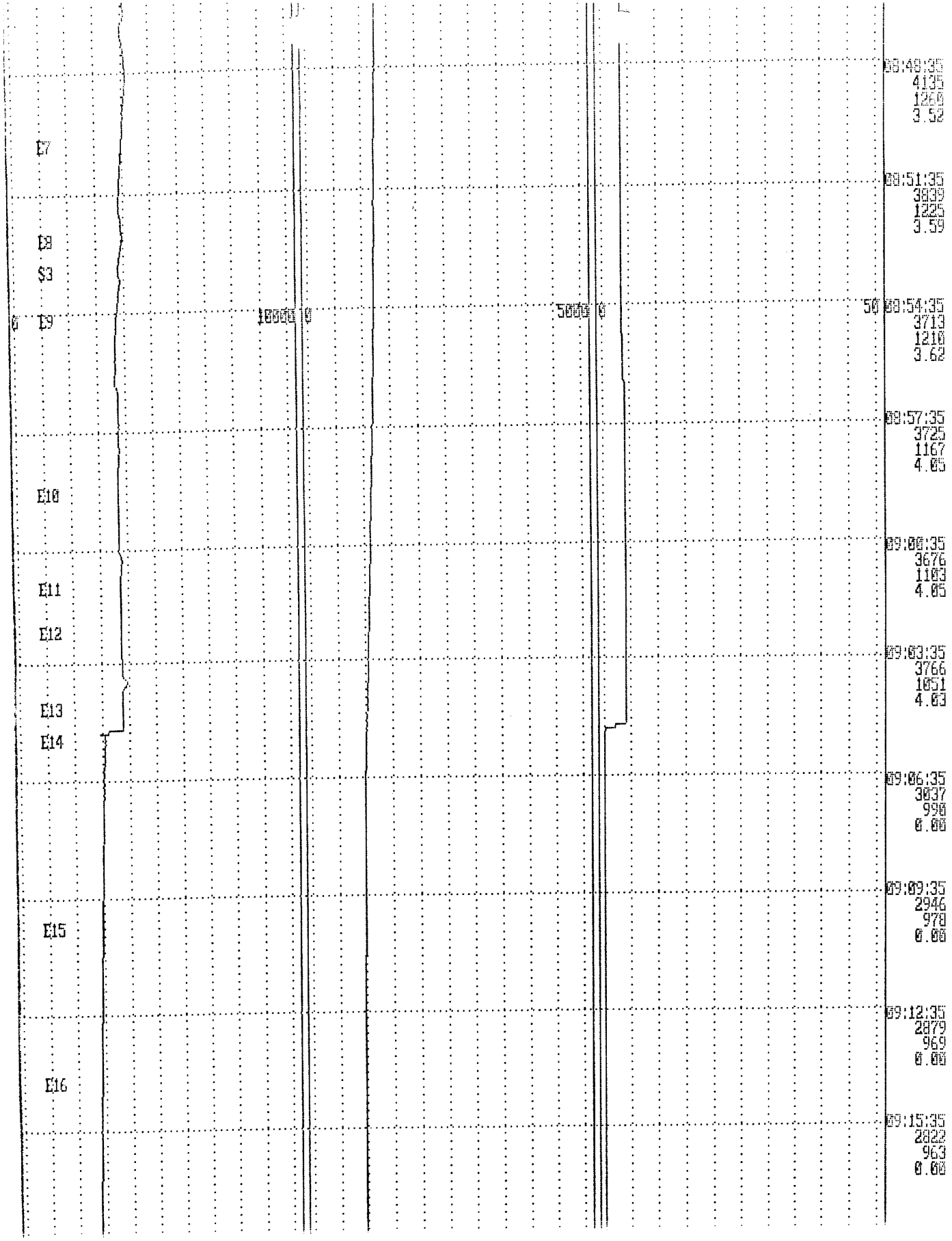
REALTIME STRIP CHART

1. Tubing Press (psi)
2. Annulus Press (psi)
3. Clean Rate (bpm)



PAUSE

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3839
1225
3.59
08:54:35
3713
1210
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08:57:35
3725
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4.05
09:00:35
3676
1103
4.05
09:03:35
3766
1051
4.03
09:06:35
3037
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0.00
09:09:35
2946
970
0.00
09:12:35
2879
969
0.00
09:15:35
2822
963
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NM OIL CONS COMMISSION
Dr ar DD
Artesia, NM 88210

C1SF

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NM 42410

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

7. If Unit or CA, Agreement Designation

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ■ Gas Well ☐ Other

8. Well Name and No.
Federal T #1

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-015-26404

3. Address and Telephone No.
P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905

10. Field and Pool, or Exploratory Area
N. Illinois Camp Morrow

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
660' FNL & 990' FEL
Sec. 12-T18S-R27E
Unit A

11. County or Parish, State
Eddy Co., N.M.

12. **CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
■ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	■ Other Casing Integrity Test	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

- Loaded casing with 80 bbls. water and tested to 1,000#. Lost 10# in 30 minutes. Casing integrity test witnessed and approved by BLM representative Cathy Queen on 5/23/95.

- Had no pressure on 5-1/2" - 8-5/8" Annulus or 8-5/8" - 13-3/8" Annulus.

RECEIVED
JUL 10 1995
OIL CON. DIV.
DIST. 2

ACCEPTED FOR RECORD
L Lara
- 7 1995
CARLSBAD, NEW MEXICO

14. I hereby certify that the foregoing is true and correct
Signed [signature] Title Engineer Date 5/24/95

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instructions on Reverse Side

NM OIL CONS COMMISSION
Drawer DD
Artesia, NM 88210

[redacted] c/SF

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM 42410
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ■ Gas Well ☐ Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 660' FNL & 990' FEL Sec. 12-T18S-R27E Unit A
8. Well Name and No.: Federal "T" #1
9. API Well No.: 30-015-26404
10. Field and Pool, or Exploratory Area: N. Illinois Camp Morrow
11. County or Parish, State: Eddy Co. N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
■ Notice of Intent	☐ Abandonment	☐ Change of Plans
	☐ Recompletion	☐ New Construction
☐ Subsequent Report	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
☐ Final Abandonment Notice	☐ Altering Casing	☐ Conversion to Injection
	■ Other Temporary Abandonment	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Mewbourne Oil requests temporary abandonment status for the above referenced well for the purpose of evaluating further behind pipe potential. This well passed the casing integrity test as noted on the attached sundry notice.

RECEIVED AUG 7 8 59 AM '95 CARLSBAD AREA

TA APPROVED FOR 12 MONTH PERIOD
ENDING 5/23/96

RECEIVED
AUG 30 1995
OIL CON. DIV.
DIST. 2

14. I hereby certify that the foregoing is true and correct
Signed [signature] Title Engineer Date Aug. 3, 1995

(This space for Federal or State office use)
Approved by ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 8/28/95
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division
811 S. 1st Street
Artesia, NM 88210-2834

FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993

5. Lease Designation and Serial No.
NM 42410

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
Federal T #1

9. API Well No.
30-015-26404

10. Field and Pool, or Exploratory Area
N. Illinois Camp Morrow

11. County or Parish, State
Eddy Co., NM

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

DEC 05 '96
O. C. D.
ARTESIA, OFFICE

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Mewbourne Oil Company

3. Address and Telephone No.
P.O. Box 5270, Hobbs, NM 88241 (505) 393-5905

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
660' FNL & 990' FEL
Sec. 12-T18S-R27E

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other Temporary Abandonment	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Mewbourne Oil Company requests an extension of Temporary Abandonment Status for the above referenced well for the purpose of evaluating further behind pipe potential. This well passed the casing integrity test on 05/23/95 and indicates no additional tests should be needed.

RECEIVED
NOV 27 9 50 AM '96

14. I hereby certify that the foregoing is true and correct

Signed Robert G. Jones Title Engineer Date 11/25/96

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

N.M. Oil Cons. Division
811 S. 1st Street
Artesia, NM 88210-2834

c/S F

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-42410

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ☐ Gas Well ☒ Other

2. Name of Operator: Mewbourne Oil Company

3. Address and Telephone No.: PO Box 5270, Hobbs, NM 505-393-5905

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 660' FNL & 990' FEL, Sec.12 T-18S R-27E

8. Well Name and No.: Federal T #1

9. API Well No.: 30-015-26404

10. Field and Pool, or Exploratory Area: N. Illinois Camp Morrow

11. County or Parish, State: Eddy, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
	☐ Recompletion	☐ New Construction
☒ Subsequent Report	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
☐ Final Abandonment Notice	☐ Altering Casing	☐ Conversion to Injection
	☒ Other MIT.	☐ Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinet details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markders and zones pertinent to this work.)*

The above caption well was successfully MIT'ed on 10/25/2000. (520 psi for 30 mins.)
The pressure chart is enclosed.
If any question, please call.

ACCEPTED FOR RECORD
NOV 15 2000
LB
BLM

14. I hereby certify that the foregoing is true and correct

Signed [signature] Title N.M. Young District Manager Date 11/01/00

(This space for Federal or State office use)

Approved by Record Only Title _____ Date _____

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

OCD - Artesia

C/SF

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-42410

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ☐ Gas Well ☒ Other

8. Well Name and No.: Federal T #1

2. Name of Operator: Mewbourne Oil Com[any

9. API Well No.: 30-015-26404

3. Address and Telephone No.: PO Box 5270, Hobbs, NM 505-393-5905

10. Field and Pool, or Exploratory Area: N. Illinois Camp Morrow

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 660' FNL & 990' FEL, Sec.12 T-18S R-27E

11. County or Parish, State: Eddy, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
	☐ Recompletion	☐ New Construction
☐ Subsequent Report	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
☐ Final Abandonment Notice	☐ Altering Casing	☐ Conversion to Injection
	☒ Other CIT & Extend T/ A.	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinet details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markders and zones pertinent to this work.)*

The above caption well is currently under T/A status. Mewbourne Oil Company would like to extend this status. The well has a 5 1/2" CIBP above all perfs @ 6800". We are considering converting this well into a SWD. At this time, Mewbourne would like to schelude
a CIT (500 psi) & after passing, extend T/A status for an additional time.

If any question, please call.

NOV 2000
RECEIVED
OCD - ARTESIA

TA approved for 12 month period
10/25/2001

BUREAU OF LAND MGMT.
CARLSBAD RESOURCE AREA

RECEIVED
2000 OCT 10 P 2: 34

14. I hereby certify that the foregoing is true and correct

Signed N.M. Young Title N.M. Young District Manager Date 10/06/00

(This space for Federal or State office use)

Approved by (ORIG. SGD.) JOE G. LARA Title Petroleum Engineer Date 11/6/2000

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD - Artesia

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NM-42410

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other

8. Well Name and No.
Federal T #1

2. Name of Operator
Mewbourne Oil Com[any

9. API Well No.
30-015-26404

3. Address and Telephone No.
PO Box 5270, Hobbs, NM 505-393-5905

10. Field and Pool, or Exploratory Area
N. Illinois Camp Morrow

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
660' FNL & 990' FEL, Sec.12 T-18S R-27E

11. County or Parish, State
Eddy, NM

RECEIVED
OCD - ARTESIA

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
	☐ Recompletion	☐ New Construction
☐ Subsequent Report	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
☐ Final Abandonment Notice	☐ Altering Casing	☐ Conversion to Injection
	☒ Other CIT & Extend T/ A.	☐ Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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a CIT (500 psi) & after passing, extend T/A status for an additional time.

If any question, please call.

TA Approved For 12 Month Period
Ending 10/25/2001

Note to Operator:
Please submit a copy of pressure test chart.

Rec'd a copy 01/19/2000

RECEIVED
2000 OCT 10 P 2:34
BUREAU OF LAND MGMT.
CARLSBAD RESOURCE AREA

14. I hereby certify that the foregoing is true and correct
Signed N.M. Young Title N.M. Young District Manager Date 10/06/00

(This space for Federal or State office use)
Approved by Joe G. Lara Title Petroleum Engineer Date 11/6/2000
Conditions of approval, if any:

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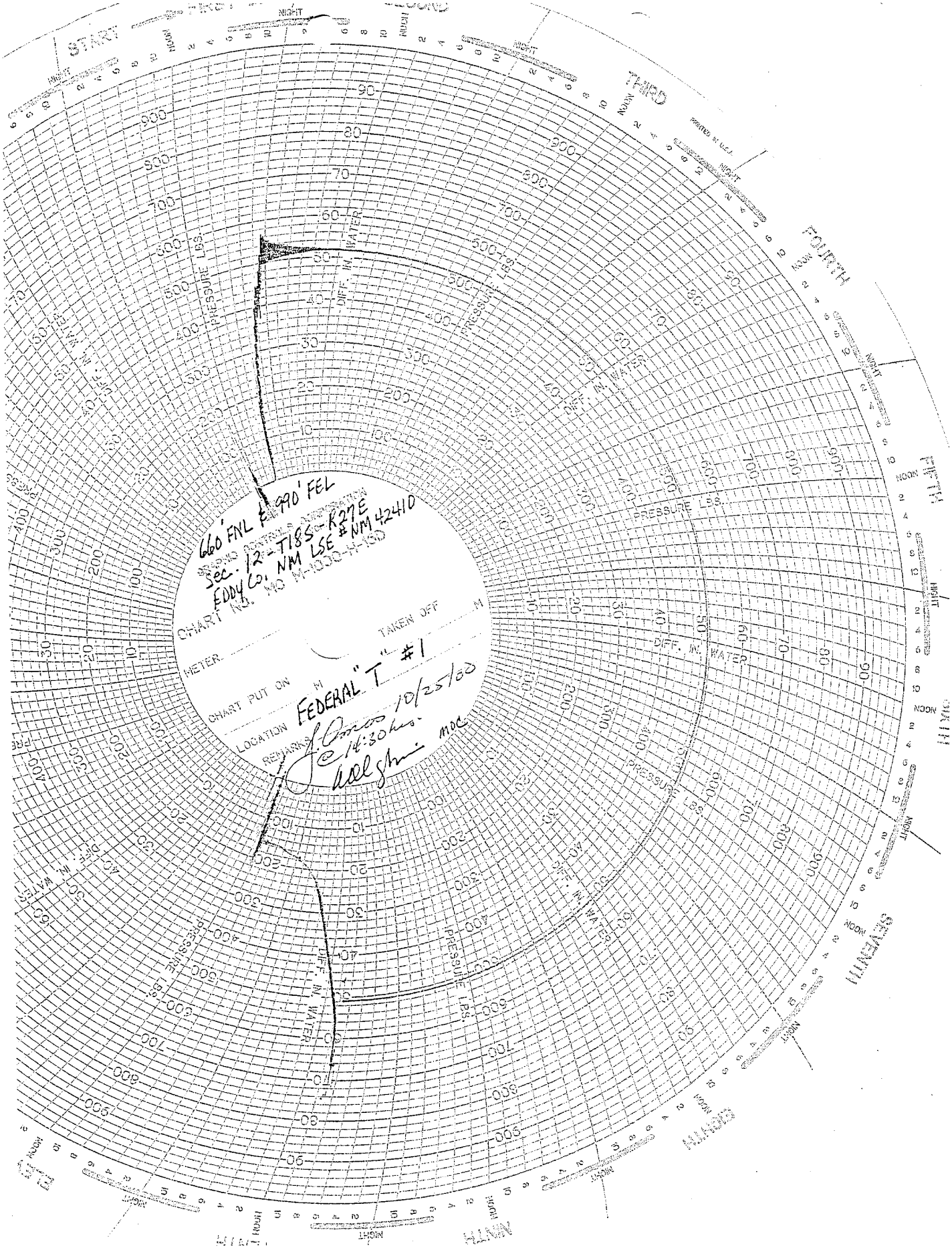
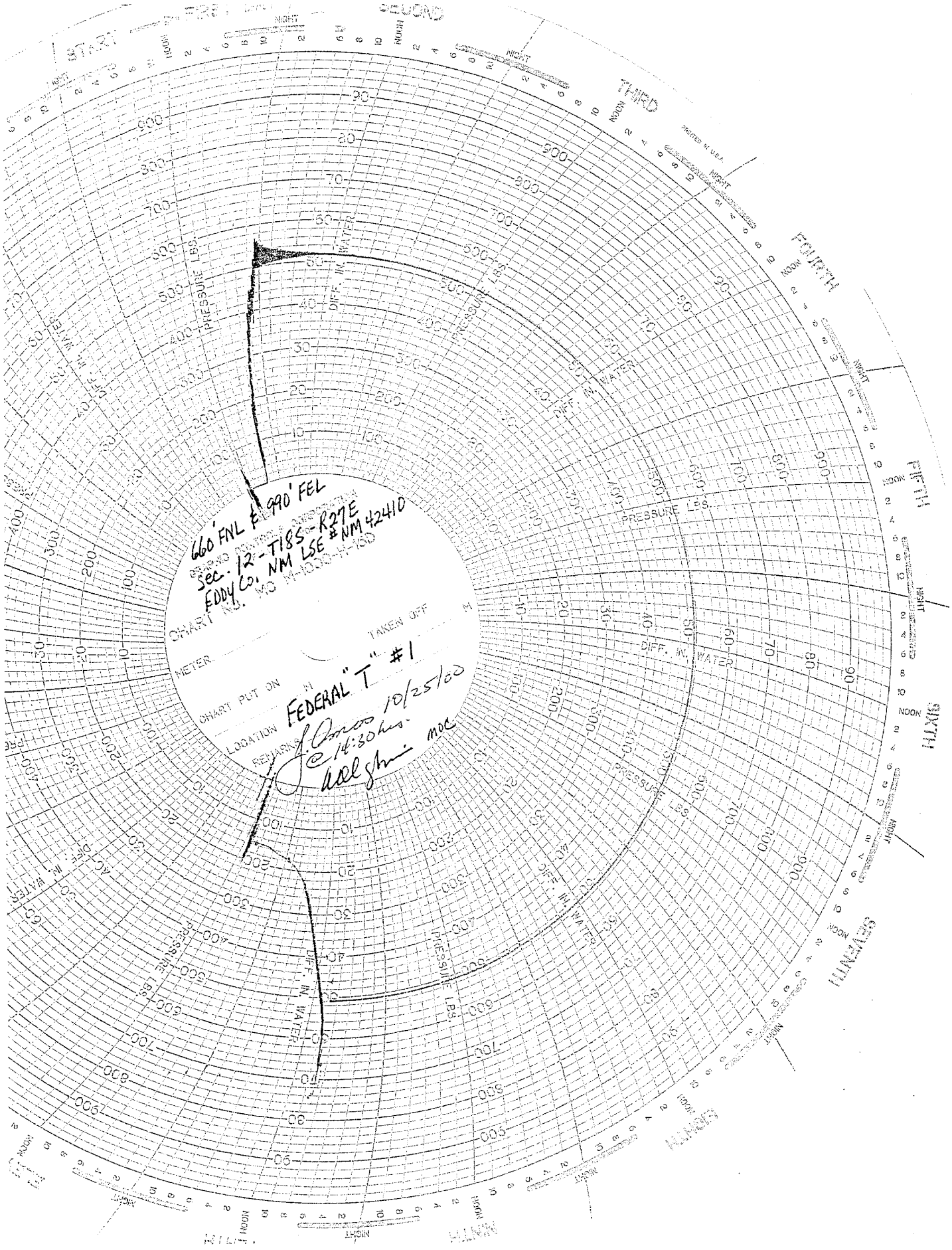
*See Instruction on Reverse Side


START
FIRST
SECOND
THIRD
FOURTH
FIFTH
SIXTH
SEVENTH
EIGHTH
NINTH
TENTH
ELEVENTH
TWELFTH
NOON
NIGHT
DIFF. IN WATER
PRESSURE LBS.
PRINTED IN U.S.A.
660' FNL & 990' FEL
Sec. 12-T18S-R27E
EDDY CO. NM LSE #NM 42410
CHART NO. MP M-1000-H-150
METER
TAKEN OFF
CHART PUT ON
LOCATION
FEDERAL "T" #1
REMARKS
10/25/80
@ 14:30 hrs.
MOC


START
SECOND
THIRD
FOURTH
FIFTH
SIXTH
SEVENTH
EIGHTH
NINTH
TENTH
ELEVENTH
TWELFTH
NOON
NIGHT
PRESSURE LBS.
DIFF. IN WATER
660' FNL & 990' FEL
Sec. 12-T18S-R27E
EDDY Co. NM LSE #NM 42410
CHART NO.
METER
TAKEN OFF
CHART PUT ON
LOCATION
REMARKS
FEDERAL "T" #1
10/25/80
@ 14:30hrs.
moc

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

Field Inspection Program
"Preserving the Integrity of Our Environment"

05-Dec-03

MEWBOURNE OIL CO
PO BOX 7698
TYLER, TX 75711-0000

NOTICE OF VIOLATION - Inspection

Dear Operator:

The following inspection(s) indicate that the well, equipment, location or operational status of the well(s) failed to meet standards of the New Mexico Oil Conservation Division as described in the detail section below. To comply with standards imposed by Rules and Regulations of the Division, corrective action must be taken immediately and the situation brought into compliance. The detail section indicates preliminary findings and/or probable nature of the violation. This determination is based on an inspection of your well or facility by an inspector employed by the Oil Conservation Division on the date(s) indicated.

Please notify the proper district office of the Division, in writing, of the date corrective actions are scheduled to be made so that arrangements can be made to reinspect the well and/or facility.

INSPECTION DETAIL SECTION

FEDERAL T 001 A-12-18S-27E **30-015-26404-00-00**

Inspection Date	Type Inspection	Inspector	Violation?	*Significant Non-Compliance?	Corrective Action Due By:	Inspection No.
12/05/2003	Routine/Periodic	Mike Bratcher	Yes	No	3/9/2004	iMLB0333931134

Comments on Inspection: TA status for this well expired 10/25/01. Last production reported was 7/93. Well is in violation of Rule 201. (Idle Well)

In the event that a satisfactory response is not received to this letter of direction by the "Corrective Action Due By:" date shown above, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Divison Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of CIVIL PENALTIES for your violation of OCD rules.

Sincerely,

Mike Bratcher

Artesia OCD District Office

Note: nformation in Detail Section comes directly from field inspector data entries - not all blanks will contain data.
*Significant Non-Compliance events are reported directly to the EPA, Region VI, Dallas, Texas.

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

Field Inspection Program
"Preserving the Integrity of Our Environment"

05-Dec-03

MEWBOURNE OIL CO
PO BOX 7698
TYLER, TX 75711-0000

NOTICE OF VIOLATION - Inspection

Dear Operator:

The following inspection(s) indicate that the well, equipment, location or operational status of the well(s) failed to meet standards of the New Mexico Oil Conservation Division as described in the detail section below. To comply with standards imposed by Rules and Regulations of the Division, corrective action must be taken immediately and the situation brought into compliance. The detail section indicates preliminary findings and/or probable nature of the violation. This determination is based on an inspection of your well or facility by an inspector employed by the Oil Conservation Division on the date(s) indicated.

Please notify the proper district office of the Division, in writing, of the date corrective actions are scheduled to be made so that arrangements can be made to reinspect the well and/or facility.

INSPECTION DETAIL SECTION

FEDERAL T 001 A-12-18S-27E **30-015-26404-00-00**

Inspection Date	Type Inspection	Inspector	Violation?	*Significant Non-Compliance?	Corrective Action Due By:	Inspection No.
12/04/2003	Routine/Periodic	Mike Bratcher	Yes	No	3/9/2004	iMLB0333840462

Comments on Inspection: Well sign is illegible and is not standing. Violation Rule 103.

In the event that a satisfactory response is not received to this letter of direction by the "Corrective Action Due By:" date shown above, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Divison Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of CIVIL PENALTIES for your violation of OCD rules.

Sincerely,

Artesia OCD District Office

Note:nformation in Detail Section comes directly from field inspector data entries - not all blanks will contain data.
*Significant Non-Compliance events are reported directly to the EPA, Region VI, Dallas, Texas.

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

9 January 2004

MEWBOURNE OIL CO
PO Box 7698
Tyler TX 75711

RE: Federal T 001 A-12-18s-27e API 30-015-26404 Violation of Rule 103:Well sign violation

Dear Sirs:
This second directive is to notify you that these wells are still in violation of Rule 103

On December 4,2003 a letter was sent notifying you on the violation of Rule 103. An inspection of the wells on January 6, 2004 found no action had been taken.

Rule 103 of the New Mexico Oil Conservation Division provides as follows:
103 SIGN ON WELLS
All wells and related facilities by the Division shall be identified by a sign, which sign shall remain in place until the well is plugged and abandoned and the related facilities are closed. For drilling wells, the sign shall be posted on the derrick or not more than 20 feet from the well. The sign shall be of durable construction and the lettering shall be legible and large enough to be read under normal conditions at a distance of 50 feet. The wells on each lease or property shall be numbered in non-repetitive, logical and distinctive sequence. An operator will have 90 days from the effective date of an operator name change to change the operator name on the well sign unless an extension of time, for good cause shown along with a schedule for making the changes, is granted. Each sign shall show the:
1. number of well;
2. name of property;
3. name of operator;
4. location by footage, quarter-quarter section, township and range (or Unit Letter can be substituted for the quarter-quarter section), and
5. API number.

In the event that a satisfactory response is not received to this letter of direction by February 6,2004 further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of **CIVIL PENALTIES** for your violation of OCD rules.

Sincerely,

Mike Bratcher

Mike Bratcher, Compliance Officer

Form 3160-5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0135
Expires: January 31, 2004

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
NM-42410

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☐ Gas Well ☑ Other

8. Well Name and No.
Federal T #1

2. Name of Operator
Mewbourne Oil Company 14744

9. API Well No.
30-015-26404

3a. Address
PO Box 5270 Hobbs, NM 88240

3b. Phone No. *(include area code)*
505-393-5905

RECEIVED
APR 2 2 2004
OCD-ARTESIA

10. Field and Pool, or Exploratory Area
N Illinois Camp Morrow

4. Location of Well *(Footage, Sec., T, R., M., or Survey Description)*
660' FNL & 990' FEL, Sec 12-T18S-R27E

11. County or Parish, State
Eddy Co NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☑ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other MIT Test
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The above caption well was successfully MIT'ed on 01/26/04. (Pressured casing to 570#, held OK for 30 mins)
The pressure chart is enclosed.

Requesting extension of temporary abandon status.
5 1/2" CIBP set @ 6800'. No type of hardware in hole.

TA APPROVED FOR 12 MONTH PERIOD
ENDING 1/26/05

Accepted for record - NMOCD

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)* NM Young

Title Hobbs District Manager

Signature

Date 01/27/04

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by *(Signature)* /s/ Joe G. Lara

Name *(Printed/Typed)* /s/ Joe G. Lara

Title Pet. Engr.

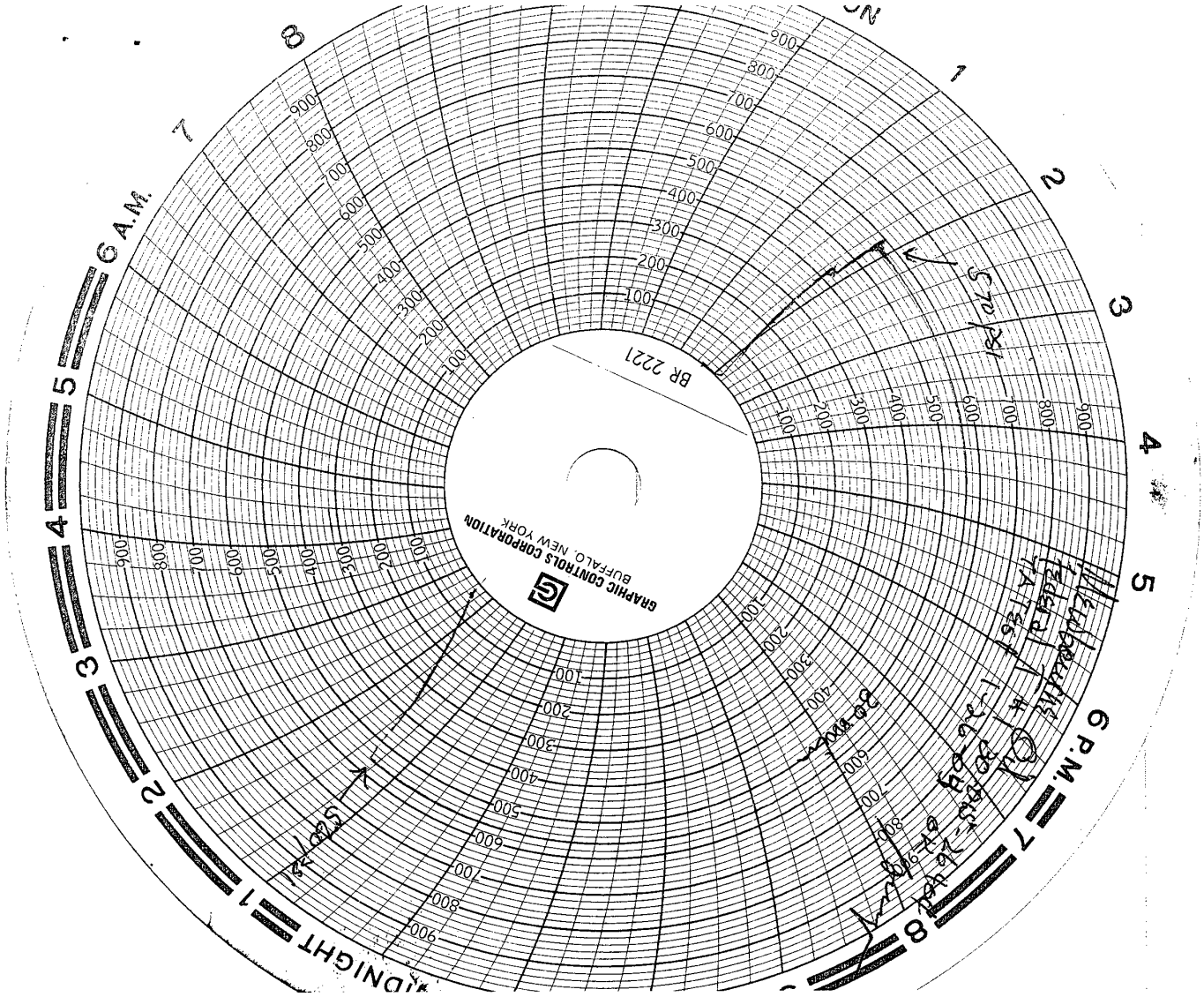
Office CARLSBAD FIELD OFFICE

Date 4/20/04

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on next page)



District II
1301 W. Grand Ave., Artesia, NM 88210
Phone:(505) 748-1283 Fax:(505) 748-9720

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-145
Permit 72521

Change of Operator

Previous Operator Information		**New Operator Information**	
		Effective Date:	4/1/2008
OGRID:	14744	OGRID:	6137
Name:	MEWBOURNE OIL CO	Name:	DEVON ENERGY PRODUCTION COMPANY, LP
Address:	PO BOX 5270	Address:	20 N Broadway
Address:		Address:	
City, State, Zip:	HOBBS , NM 88241	City, State, Zip:	Oklahoma City , OK 73102

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the certified list of wells is true to the best of my knowledge and belief.

Previous Operator		**New Operator**	
Signature:	Monty Whetstone	Signature:	Gregg Jacob
Printed Name:	Monty L. Whetstone	Printed Name:	Gregg Jacob
Title:	Vice-President Operations	Title:	Western Operations Manager
Date:	4/4/08 Phone: (903) 561-2900	Date:	4/07/08 Phone: (405) 552-4591

NMOCD Approval
Electronic Signature: Carmen Reno, District 2
Date: April 07, 2008

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APROVED
OMB NO. 1004-0135
EXPIRES: NOVEMBER 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

OCD-ARTESIA

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals

SUBMIT IN TRIPLICATE

JUL 21 2008
OCD-ARTESIA

1a Type of Well ☐ Oil Well ☑ Gas Well ☐ Other	5. Lease Serial No. **NM-42410**
2. Name of Operator **DEVON ENERGY PRODUCTION COMPANY, LP**	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. **20 North Broadway, Oklahoma City, OK 73102** **405-552-8198**	7. Unit or CA Agreement Name and No.
4. Location of Well (Report location clearly and in accordance with Federal requirements)* **660' FNL & 990' FEL** **Section 12 T18S R27E, Unit A**	8 Well Name and No. **Federal T 1**
	9. API Well No **30-015-26404**
	10. Field and Pool, or Exploratory **Wolfcamp**
	12. County or Parish **Eddy** 13. State **NM**

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OS SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☑ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work and approximate duration thereof If the proposal deepen directionally or recomplete horizontally, give subsurface location and measured and true vertical depths of all pertinent markers and zones Attach the Bond under which the work will be performed or provide the Bond No on file with BLM/BIA Required subsequent reports shall be filed within 30 days following completion of the involved operations If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed Final Abandonment Notices shall be filed only after all requirement, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection)

Devon Energy Production Company, LP is preparing Form C108, Applicaton for Authorization to Inject that will be filed with the Oil Conservation Division, Santa Fe, New Mexcio office. Devon is proposing to convert the Federal T #1 well to SWD in the Lower Wolfcamp and Cisco zones from 7400' to 8200'. The BLM has been sent a copy of C108 application filed with the OCD.

1. RIH and drill out CIBP's at 6,800', 7,078', & 7,265'.
2. Perform injection step rate test in the Lower Wolfcamp.
3. Drill out CIBP at 7,560' and cement retainers at 7,745', 7,780', & 7,820', & 8,000'.
4. Perforate / Reperforate Cisco with casing gun, 0.42" EHD, 2 spf from 7,893'-7,899'; 7,902'-7,907'; 7,910'-7,916'; 7,919'-7,927'; 7,932'-7,959'; 7,965'-7,967'; 7,971'-7,972'; 7,976'-7,978'; 8,034'-8,042'; 8,055'-8,060'; 8160'-8164'.
5. Frac as recommended.
6. RIH with RBP and set at +/- 7,865'.
7. Perforate / Reperforate Cisco with casing gun, 0.42" EHD, 2 spf at 7,758'-7,768'; 7,790'-7,798'; 7,800'-7818'; 7,832'-7,840'.
8. Frac as per recommended.
9. POOH with RBP and RIH with tubing and packer. Set packer at 7,600'. Perform injection step rate test in Cisco.
10. Tie in disposal line routed from West Red Lake SWD Battery and establish injection.

* Either, return the well to active status by 11-16-08 or submit plans for abandonment.

14. I hereby certify that the foregoing is true and correct

Signed Name **Norvella Adams** Title Sr. Staff Engineering Technician Date 6/17/2008

(This space for Federal or State Office use)

Approved by Title Date JUL 16 2008

Conditions of approval, if any:

APPROVED
JAMES A. AMOS
SUPERVISOR EPS

Title 18 U S C Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

*See Instruction on Reverse Side

Accepted for record - NMOCD

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr , Hobbs, NM 88240
District II
1301 W Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S St Francis Dr , Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

WELL API NO. **30-015-26404**	
5. Indicate Type of Lease STATE ☐ FEE ☐	
6. State Oil & Gas Lease No.	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)	7. Lease Name or Unit Agreement Name **Federal T**
1. Type of Well: Oil Well ☐ Gas Well ☐ Other –Convert to SWD	8. Well Number **1**
2. Name of Operator **DEVON ENERGY PRODUCTION COMPANY, LP**	9. OGRID Number **6137**
3. Address of Operator **20 North Broadway, Oklahoma City, OK 73102 405-552-8198**	10. Pool name or Wildcat **L. Wolfcamp and Cisco** 96136

4. Well Location
Unit Letter A : **660'** feet from the NORTH line and **990'** feet from the EAST line
Section 12 Township 18S Range 27E NMPM County **Eddy**

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* **3709' KB; 3697' GL**

Pit or Below-grade Tank Application ☐ or Closure ☐
Pit type____ Depth to Groundwater____ Distance from nearest fresh water well____ Distance from nearest surface water____
Pit Liner Thickness: mil Below-Grade Tank: Volume ____ bbls; Construction Material ____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
OTHER: ☐		OTHER ☒ **Convert to SWD, Admin. Order SWD-1135**	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

8/04/08 RU unit. ND wellhead and NU BOP. TIH with bit and drill collars.
8/05/08 Drill CIBP at 6800' and 7078'.
8/06/08 Drilled through cement at 7525', CIBP at 7300' and cement at 7560' and CIBP at 7595'.
8/07/08 Ran step rate test; pumped 50 bbls at ½ bbl/min – 0# psi, pumped 50 bbls at 1 bbl/min -20# psi, pumped 50 bbls at 2 bbls/min – 75# psi, pumped 50 bbls at 3 bbls/min – 170# psi, pumped 50 bbls at 4 bbls/min – 250 psi.
8/08/08 Trucked in and established injection in the Wolfcamp at 150 BWPD at 170 psi.
8/11/08 Drilled cement retainers at 7745', and 7780'.
8/12/08 Drilled cement retainer at 7820' and 8000'. Circulate hole and TOH with tubing and bit.
8/13/08 Perforate Cisco from 7893' – 8060'; total 140 holes. TIH and set packer at 7688'. Frac with 5,040 gals 15% HCl + 120,372 gals Spectra Star 2500 + 167,552 # 20/40 White sand.
8/14/08 TIH with retrievable tool and latch onto packer. Release packer and TOOH with packer and tubing. RU wireline and perforate Cisco from 7758'-7840'; 228 total holes.
8/15/08 TIH with packer and set at 7582'. NU frac valve.
8/16/08 Frac 7758'-8060' with 4500 gals 15% Spearhead acid + 119,255 gals Spectra 2500 + 106,750 # 20/40 100% White sand. RD.
8/18/08 Release packer. TOOH with packer and tubing.
8/20/08 TIH with bailer and bailed sand. Bailed sand to 8460'. TOOH with tubing. ND BOP and NU flange. Waiting on tubing.
9/15/08 TIH with packer and tubing. Set packer at 6789'. ND BOP and NU tree. Ran MIT test to 500 # for 30 minutes – ok, notified Mike Bratcher with OCD. TOOH with tubing. RIH with 3 ½" IPC tubing and set at 6789'. Injection line installation in progress.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.**

SIGNATURE____ TITLE **Sr. Staff Engineering Technician** DATE 9/17/08
Type or print name Norvella Adams E-mail address: **norvella.adams@dvn.com** Telephone No. **405-552-8198**

For State Use Only
APPROVED BY:____ TITLE____ DATE____
Conditions of Approval (if any):

Accepted for record
NMOCD

DEVON ENERGY PRODUCTION COMPANY LP			
Well Name: FEDERAL T #1		Field: NORTH ILLINOIS CAMP MORROW	
Location: 660' FNL & 990' FEL; SEC 12-T18S-R27E		County: EDDY	State: NM
Elevation: 3634' KB; 3618' GL		Spud Date: 6/28/90	Compl Date: 9/13/90
API#: 30-015-26404	Prepared by: Norvella Adams	Date: 9/17/08	Rev:

Current Schematic
L. Wolfcamp and Cisco SWD

Formation Tops

Morrow 9,600-10,250'
Atoka 9.230'- 9,700'
Upper Wolfcamp 6,400' - 7,200'
Abo 5,600' - 6,200'
Yeso 3,300' 0 3,900'
San Andres 2,000' - 2,800'
Queen 1,450' - 1,650'

17-1/2" Hole
13-3/8", 68#, LTC, @ 472'
Cmt'd w/450 Sx. Circ to surface

12-1/4" Hole
8-5/8", J55, 32#, STC, @ 2,589'
Cmt'd w/900 Sx. Circ to surface

3-1/2", 9.3 #, N80, Injection tubing @ 6789'

5-1/2" IPC Packer @ 6,789'

WOLFCAMP *(8/21/93)*
6,868' - 7,038'

WOLFCAMP *(8/18/93)*
7,092' - 7,097'; 7,120' - 7,146'

WOLFCAMP *(8/16/93)*
7,330' - 7,340'; 7,350' - 7,360'

SWD Perforations:
CISCO *(8/1/93)*
7,685' - 7,695'

CISCO *(7/30/93)*
7,760' - 7,768'

CISCO *(7/28/93)*
7,790' - 7,798'

CISCO *(7/25/93)*
7,932' - 7,940'

CISCO *(7/22/93)*
8,034' - 8,042'
8,055' - 8,060'

Frac 7758'-7840' with 4500 gals 15% Spearhead acid and 119,255 gals Spectra Star 2500 + 106,750 # 100% 20/40 White sand.

Frac 7893'-8060' with 5040 gals 15% HCl acid and 120,372 gals Spectra Star 2500 + 167,552 # 100% 20/40 White sand.

35' cement. 9,005' PBD
CIBP @ 9,040' *(7/21/93)*

4" Liner top @ 9,055'

7-7/8" Hole
5-1/2", N80, 17#, LTC, @ 9,473'
Cmt'd w/430 Sx

MORROW *(9/14/90)*
10,008' - 10,014'
10,038' - 10,054'

CIBP @ 9,950' *(7/19/93)*

4-3/4" Hole
4" 10.46#, L80 Liner @ 9,055' - 10,141'
Cmt'd w/80 Sx

10,100' PBD

10,141' TD

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division

Administrative Order SWD-1135
July 16, 2008

APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR PRODUCED WATER DISPOSAL, EDDY COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Devon Energy Production Company, L.P. (OGRID No. 6137) made application to the New Mexico Oil Conservation Division for permission to utilize for produced water disposal its Federal T Well No. 1 (API No. 30-015-26404) located 660 feet from the North line and 990 feet from the East line of Section 12, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Rule 701(B) of the Division Rules. Satisfactory information has been provided that all offset operators and surface owners have been duly notified. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met and no objections have been received within the waiting period prescribed by said rule. The applicant is in compliance with Rule 40.

IT IS THEREFORE ORDERED THAT:

Devon Energy Production Company, L.P. ("operator") is hereby authorized to utilize its Federal T Well No. 1 (API No. 30-015-26404) located 660 feet from the North line and 990 feet from the East line of Section 12, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Lower Wolfcamp formation and the Cisco formation through perforations from 7,400 feet to 8,200 feet and through plastic-lined tubing set in a packer located within 100 feet of the top of the injection interval.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

After installing injection tubing, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved *leak detection device* in order to determine leakage in the casing, tubing, or packer.

The injection well or system shall be equipped with a *pressure limiting device* in workable condition which shall, at all times, limit surface injection pressure to the maximum allowable pressure for this well. The wellhead injection pressure on the well shall be limited to **no more than 1480 psi**.

The Director of the Division may authorize an increase in the maximum injection pressure upon a proper showing by the operator that such higher pressure would not result in migration of the injected fluid from the injection formation. Such proper showing should be supported by a valid step rate test run in accordance with procedures acceptable to the Division.

The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, or without notice and hearing in event of an emergency subject to NMSA 1978 Section 70-2-23, terminate the injection authority granted herein.

The operator shall provide written notice of the date of commencement of injection and the initial reservoir pressure to the Artesia district office of the Division.

The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 706 and 1120.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator

mailed prior to the expiration date, may grant an extension thereof for good cause shown.

This order does not relieve the operator of responsibility should its operations cause any actual damage or threat of damage to protectable fresh water, human health or the environment; nor does it relieve the operator of responsibility for complying with applicable Division rules or other state, federal, or local laws or regulations.

MARK E. FESMIRE, P.E.
Director

MEF/wvjj

cc: Oil Conservation Division – Artesia
Bureau of Land Management – Carlsbad

SEP 19 2008

OCD-ARTESIA

S

Submit to Appropriate District Office
State Lease - 6 copies
Fee Lease - 5 copies
District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd, Aztec, NM 87410
District IV
1220 S St Francis Dr, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-105
Revised June 10, 2003

Well API No. 30-015-26404

5. Indicate Type of Lease ☐ STATE ☐ FEE

State Oil & gas Lease No

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a Type of Well ☐ Oil Well ☐ Gas Well ☐ Dry ☑ Other Convert to SWD; Admin Order SWD-1135

b Type of Completion ☐ New Well ☐ Work Over ☐ Deepen ☑ Plug Back ☐ Diff. Resvr., ☐ Other

7 Lease Name and Unit Agreement Name: Federal T 1

2 Name of Operator: DEVON ENERGY PRODUCTION COMPANY, LP

8. Well No.

3 Address of Operator: 20 North Broadway, Oklahoma City, OK 73102

9 Pool name or Wildcat: L. Wolfcamp and Cisco 96136

4 Well Location

Unit Letter A 660' feet from the NORTH line and 990' feet from the EAST line

Section 12 Township 18S Range 27E NMPM County Eddy

10. Date Spudded	11. Date T D Reached	12 Date Completed	13 Elevations (DR, RKB, RT, GL)*	14 Elev Casinghead
6/28/1990	8/25/1990	Orig 9/13/90 SWD 9/15/08	3634' KB; 3618' GL	

15. Total Depth MD	16 Plug Back T.D	17 If Multiple Compl How Many Zones	18. Intervals Drilled BY	Rotary Tools	Cable Tools
10,141	9005'	No		X	

19 Producing Intervals(s), of this completion - Top, Bottom, Name
L. Wolfcamp; 6,868' - 7,360' and Cisco; 7,758' - 8,060' (Salt Water Disposal Only)

20 Was Directional Survey Made: No

21. Type Electric and Other Logs Run
DLL-MGRD, SDL-DSN (original logs)

22 Was Well Cored: No

23 CASING RECORD (Report all strings set in well)

Casing Size	Weight LB /FT.	Depth Set	Hole Size	Cementing Record	Amount Pulled
13-3/8"	68#	472'	17-1/2"	450 sx	
8-5/8"	32#	2589'	12 1/4"	900 sx	
5-1/2"	17#	9473'	7-7/8"	430 sx	

24 Liner Record

Size	top	Bottom	Sacks Cement	Screen
4"	9055'	10141'	80 sx	

25 Tubing Record

Size	Depth Set	Packer Set
3-1/2" (IPC)	6789'	6789'

26 Perforation record (interval, size, and number)

Wolfcamp; 6868'-7038' (8/21/93)
Wolfcamp; 7092'-7097'; 7120'-7146' (8/18/93)
Wolfcamp; 7330'-7340'; 7350'-7360' (8/16/93)
Cisco; 7893'-8060'; (140 holes)
Cisco; 7758'-7840'; (228 holes)
Morrow; 10008'-10054'; (still under CIBP)

27. Acid, Shot, Fracture, Cement, Squeeze, ETC.

Depth Interval	Amount and Kind Material Used
7893'-8060'	Frac--5040 gals 15% HCl acid and 120,372 gals Spectra Star 2500 + 167,552 # 100% White 20/40 Sand.
7758'-7840'	Frac--4500 gals 15% Spearhead acid and 119,255 gals Spectra Star 2500 + 106,750 # 100% White 20/40 Sand.

28 PRODUCTION

Date First Production	Production Method (Flowing, Gas lift, pumping - Size and type pump)	Well Status (Prod Or Shut-In)
NA		9/16/08-Converted to SWD

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - BbL	Gas - MCF	Water - Bbl	Gas - Oil Ratio
	24						#DIV/0!

Flowing Tubing Press	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl	Gas - MCF	Water - Bbl	Oil Gravity - API (Corr)

29. Disposition of Gas (Sold, used for fuel, vented, etc.)
NA--Converted to SWD 9/16/08

Test Witnessed By

30. List Attachments
Wellbore schematic

31. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief

SIGNATURE Printed Name Norvella Adams Title Sr Staff Engineering Technician DATE 9/17/2008

E-mail Address. norvella.adams@dvn.com

Accepted for record
NMOCD

This Form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly drilled or deepened well It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem test. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported For multiple completions, items 25 through 29 shall be reported for each zone The form is to be filed in quintuplicate except on state land, where six copies are required See Rule 1105

INDICATE FORMATIONS TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

rn New Mexico				Northwestern New Mexico			
Yates	476'	T. Canyon		T Ojo Alamo		T. Penn "B"	
Queen	1218'	T Strawn		T. Kirtland-Fruitland		T. Penn "C"	
Grayburg	1572'	T Atoka		T. Pictured Cliffs		T Penn "D"	
San Andres	2072'	T Miss		T Cliff House		T. Leadville	
Tubb	4824'	T. Devonian		T. Menefee		T. Madison	
Abo	6016'	T Silunan		T. Point Lookout		T Elbert	
Wolfcamp	7682'	T Montoya		T Mancos		T. McCracken	
Cisco	8912'	T. Simpson		T. Gallup		T Ignacio Otzte	
Strawn	9513'	T McKee		Base Greenhorn		T Granite	
Atoka	9628'	T. Ellenburger		T. Dakota		T	
Morrow	9828'	T Gr Wash		T. Morrison		T	
Morrow Clastics	9965'	T Delaware Sand		T. Todilto		T.	
Lower Morrow	10104'	T. Bone Springs		T Entrada		T	
Barnett		T		T Wingate		T	
T. Wolfcamp		T		T Chinle		T	
T Penn		T.		T Permian		T	
T Cisco (Bough C)		T.		T. Penn "A"		T.	

OIL OR GAS SANDS OR ZONES

No. 1, from .... to . .. . No 3, from . ... to ....
No 2, from .... to .... No 4, from ... . .to . . . .

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole

No 1, from .... to . ... feet . ...
No 2, from . ...to .. .. feet . .. .
No. 3, from .. . . to.... . ... feet.. . ...

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thicknes In Feet	Lithology	From	To	Thickness in Feet	Lithology

Form 3160-4
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCT 06 2008
OCD-ARTESIA

FORM APROVED
OMB NO. 1004-0137
EXPIRES. March 31, 2007

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Dry ☑ Other SWD- Order 1135
b Type of Completion: ☐ New Well ☐ Work Over ☐ Deepen ☑ Plug Back ☐ Diff. Resvr., ☐ Other

5. Lease Serial No: NM-42410
6 If Indian, Allottee or Tribe Name
7 Unit or CA Agreement Name and No
8 Lease Name and Well No: Federal T 1

2 Name of Operator: DEVON ENERGY PRODUCTION COMPANY, LP

3 Address: 20 North Broadway, Oklahoma City, OK 73102-8260
3a Phone No (include area code): 405-552-8198

9 API Well No. 30-015-26404 0052
10. Field and Pool, or Exploratory: L.Wolfcamp and Cisco 96136

4 Location of Well (Report location clearly and in accordance with Federal requirements)*
At Surface: 660 FNL 990 FEL
At top prod Interval reported below
At total Depth

11. Sec, T, R, M, on Block and Survey or Area: 12 18S 27E
12. County or Parish: Eddy
13. State: NM

14 Date Spudded: 6/28/1990
15 Date T D Reached: 8/25/1990
16. Date Completed: 9/15/08 - SWD; 9/13/90 orig cmpl ☐ D & A ☑ Ready to Prod.
17 Elevations (DR, RKB, RT, GL)*: 3634' KB; 3618' GL

18. Total Depth: MD 7600' TVD
19. Plug Back T D. MD 6142' TVI
20 Depth Bridge Plug Set: MD 6177 TVI

21 Type Electric & Other Mechanical Logs Run (Submit copy of each): DLL-MGRD, SDL_DSN (original logs)

22 Was well cored? ☑ No ☐ Yes (Submit analysis)
Was DST run? ☑ No ☐ Yes (Submit report)
Directional Survey? ☑ No ☐ Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt (#/ft)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No of Sks & Type Cement	Slurry Vol (BBL)	Cement Top*	Amount Pulled
17-1/2"	13-3/8"/LT&C	68		472'		450 Sx		Surf	
12 1/4"	8-5/8"/J55	32		2589'		900 Sx		Surf	
7-7/8"	5-1/2"/LT&C	17		9473'		430 Sx		Surf	
4 3/4"	4" / L80	10.46		10,141'		80 Sx		9055'	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
3 1/2" IPC	6789'	6789'						

25 Producing Intervals / 26 Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf Status
Wolfcamp	6868'	7360'	6868'-7360'		140	Open for SWD
Cisco	7893'	7840'	7893-7840'		228	Open for SWD
Morrow	10,008'	10,054'	10,008-10,054'			Abandoned
D.						

27 Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
7893-8060'	Frac - 5040 gals 15% HCl acid and 120,372 gals Spectra Star 2500 + 167,552 # 100% White 20/40 sand.
7758-7840'	Frac - 4500 gals 15% Spearhead acid and 119,255 gals Spectra Star 2500 + 106,750 # 100% White 20/40 sand.

28 Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
NA		24	→						
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
			→				#DIV/0!		

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

ACCEPTED FOR RECORD
/S/ DAVID R. GLASS
SEP 29 2008
DAVID R. GLASS
PETROLEUM ENGINEER

			→						
Choke Size	Tbg. Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
			→						

(See instructions and spaces for additional data on reverse side)

28b Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
			→						

28c Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg Press. Flwg SI	Csg Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
			→						

(See instructions and spaces for additional data on reverse side)

29. Disposition of Gas (Sold, used for fuel, vented, etc)

30 Summary of Porous Zones (Include Aquifers).

Show all important zones of porosity and contents thereof, Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

Formation	Top	Bottom	Descriptions, Contents, etc

31 Formation (Log) Markers

Name	Top Meas Depth
Yates	476'
Queen	1218'
Grayburg	1572'
San Andres	2072'
Tubb	4824'
Abo	6016'
Wolfcamp	7682'
Cisco	8912'
Strawn	9513'
Atoka	9628'
Morrow	9828'
Morrow Clastics	9965'
Lower Morrow	10104'

32. Additional remarks (include plugging procedure).

33 Indicate which items have been attached by placing a check in the appropriate box

☐ Electrical/Mechanical Logs (1 full set req'd) ☐ Geologic Report ☐ DST Report ☐ Directional Survey

☐ Sundry Notice for plugging and cement verification ☐ Core Analysis ☑ Other Wellbore Schematic

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (Please print) Norvella Adams Title Sr. Staff Engineering Technician

Signature Date 9/17/2008

Title 18 U.S.C Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APROVED
OMB NO. 1004-0137
EXPIRES: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals

SUBMIT IN TRIPLICATE - Other instructions on page 2

5 Lease Serial No	**NM-42410**
6. If Indian, Allottee or Tribe Name	
7. Unit or CA Agreement Name and No.	
8 Well Name and No	**Federal T 1**
9 API Well No	**30-015-26404**
10. Field and Pool, or Exploratory Area	**L.Wolfcamp and Cisco**
11. County or Parish, State	**Eddy NM**

1. Type of Well ☐ Oil Well ☐ Gas Well ☑ Other **SWD conversion. Admin Order SWD-1135**

2. Name of Operator **DEVON ENERGY PRODUCTION COMPANY, LP**

3a, Address **20 North Broadway, Oklahoma City, OK 73102**

3b. Phone No. (include area code) **405-552-8198**

4 Location of Well (Footage, Sec., T., R., M , or Survey Description) **660 FNL 990 FEL A 12 18S 27E**

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OS SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☑ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☑ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work and approximate duration thereof If the proposal deepen directionally or recomplete horizontally, give subsurface location and measured and true vertical depths of all pertinent markers and zones Attach the Bond under which the work will be performed or provide the Bond No on file with BLM/BIA Required subsequent reports shall be filed within 30 days following completion of the involved operations If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed Final Abandonment Notices shall be filed only after all requirement, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection)

Converted to SWD. Administrative Order SWD-1135
8/04/08 RU unit. ND wellhead and NU BOP. TIH with bit and drill collars.
8/05/08 Drill CIBP at 6800' and 7078'.
8/06/08 Drilled through cement at 7525', CIBP at 7300' and cement at 7560' and CIBP at 7595'.
8/07/08 Ran step rate test; pumped 50 bbls at ½ bbl/min – 0# psi, pumped 50 bbls at 1 bbl/min -20# psi, pumped 50 bbls at 2 bbls/min – 75# psi, pumped 50 bbls at 3 bbls/min – 170# psi, pumped 50 bbls at 4 bbls/min – 250 psi.
8/08/08 Trucked in and established injection in the Wolfcamp at 150 BWPD at 170 psi.
8/11/08 Drilled cement retainers at 7745', and 7780'.
8/12/08 Drilled cement retainer at 7820' and 8000'. Circulate hole and TOH with tubing and bit.
8/13/08 Perforate Cisco from 7893' – 8060', total 140 holes. TIH and set packer at 7688'. Frac with 5,040 gals 15% HCl + 120,372 gals Spectra Star 2500 + 167,552 # 20/40 White sand.
8/14/08 TIH with retrievable tool and latch onto packer. Release packer and TOOH with packer and tubing. RU wireline and perforate Cisco from 7758'-7840'; 228 total holes
8/15/08 TIH with packer and set at 7582'. NU frac valve.
8/16/08 Frac 7758'-8060' with 4500 gals 15% Spearhead acid + 119,255 gals Spectra 2500 + 106,750 # 20/40 100% White sand. RD.
8/18/08 Release packer. TOOH with packer and tubing
8/20/08 TIH with bailer and bailed sand. Bailed sand to 8460'. TOOH with tubing. ND BOP and NU flange. Waiting on tubing.
9/15/08 TIH with packer and tubing. Set packer at 6789'. ND BOP and NU tree Ran MIT test to 500 # for 30 minutes – ok, notified Mike Bratcher with OCD TOOH with tubing. RIH with 3 ½" IPC tubing and set at 6789'. Injection line installation in progress.

14. I hereby certify that the foregoing is true and correct
Name: Norvella Adams — Title **Sr. Staff Engineering Technician**
Signature — Date 9/17/2008

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by /S/ DAVID R. GLASS — Title — Date

ACCEPTED FOR RECORD
SEP 2 9 2008
DAVID R. GLASS
PETROLEUM ENGINEER

Accepted for record
NMOCD

Conditions of approval, if any are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct or operations thereon. — Office

Title 18 U S C Section 1001 and Title 43 U S C Section 1212 make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

DEVON ENERGY PRODUCTION COMPANY LP

Well Name: FEDERAL T #1		Field: NORTH ILLINOIS CAMP MORROW	
Location: 660' FNL & 990' FEL; SEC 12-T18S-R27E		County: EDDY	State: NM
Elevation: 3634' KB; 3618' GL		Spud Date: 6/28/90	Compl Date: 9/13/90
API#: 30-015-26404	Prepared by: Norvella Adams	Date: 9/17/08	Rev:

Current Schematic
L. Wolfcamp and Cisco SWD

Formation Tops

Morrow 9,600-10,250'
Atoka 9.230'- 9,700'
Upper Wolfcamp 6,400' - 7,200'
Abo 5,600' - 6,200'
Yeso 3,300' 0 3,900'
San Andres 2,000' - 2,800'
Queen 1,450' - 1,650'

17-1/2" Hole
13-3/8", 68#, LTC, @ 472'
Cmt'd w/450 Sx. Circ to surface

12-1/4" Hole
8-5/8", J55, 32#, STC, @ 2,589'
Cmt'd w/900 Sx. Circ to surface

3-1/2", 9.3 #, N80, Injection tubing @ 6789'

5-1/2" IPC Packer @ 6,789'

WOLFCAMP *(8/21/93)*
6,868' - 7,038'

WOLFCAMP *(8/18/93)*
7,092' - 7,097'; 7,120' - 7,146'

WOLFCAMP *(8/16/93)*
7,330' - 7,340'; 7,350' - 7,360'

SWD Perforations:
CISCO *(8/1/93)*
7,685' - 7,695'

CISCO *(7/30/93)*
7,760' - 7,768'

CISCO *(7/28/93)*
7,790' - 7,798'

CISCO *(7/25/93)*
7,932' - 7,940'

CISCO *(7/22/93)*
8,034' - 8,042'
8,055' - 8,060'

Frac 7758'-7840' with 4500 gals 15% Spearhead acid and 119,255 gals Spectra Star 2500 + 106,750 # 100% 20/40 White sand.

Frac 7893'-8060' with 5040 gals 15% HCl acid and 120,372 gals Spectra Star 2500 + 167,552 # 100% 20/40 White sand.

35' cement. 9,005' PBD
CIBP @ 9,040' *(7/21/93)*

4" Liner top @ 9,055'

7-7/8" Hole
5-1/2", N80, 17#, LTC, @ 9,473'
Cmt'd w/430 Sx

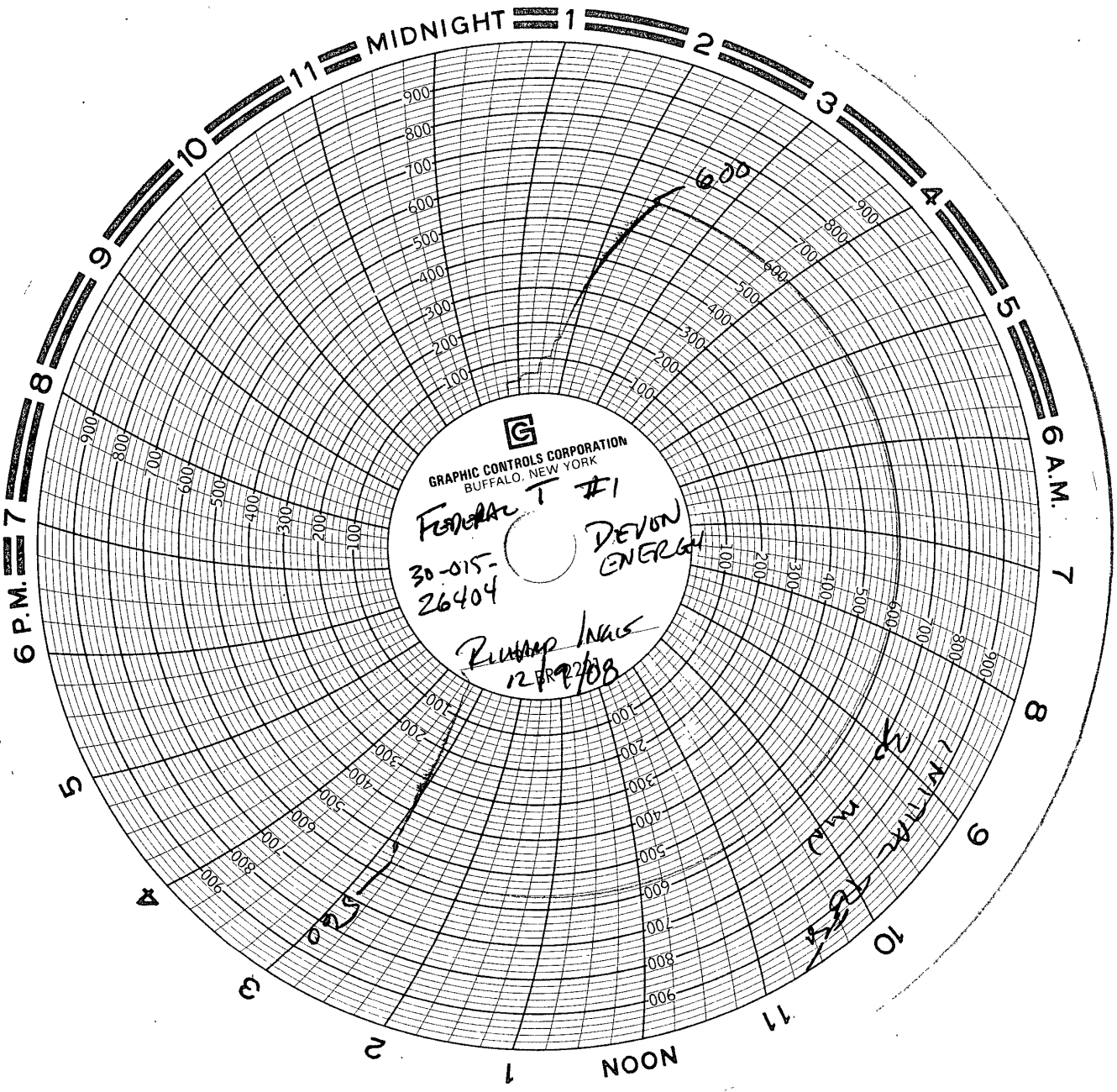
MORROW *(9/14/90)*
10,008' - 10,014'
10,038' - 10,054'

CIBP @ 9,950' *(7/19/93)*

4-3/4" Hole
4" 10.46#, L80 Liner @ 9,055' - 10,141'
Cmt'd w/80 Sx

10,100' PBD

10,141' TD


MIDNIGHT
NOON
6 A.M.
6 P.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
FEDERAL T #1
30-015-26404
DEVON ENERGY
RUMP INGS
12 PR 2/08
MILLIAN TEST
MP
600
500

District II
1301 W. Grand Ave., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

State of New Mexico
Energy, Minerals and Natural Resources

Form C-145
Permit 124456

Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Change of Operator

Previous Operator Information		New Operator Information	
		Effective Date:	Effective on the date of approval by the OCD
OGRID:	6137	OGRID:	277558
Name:	DEVON ENERGY PRODUCTION COMPANY, LP	Name:	LIME ROCK RESOURCES II-A, L.P.
Address:	20 N Broadway	Address:	1111 Bagby Street
			Suite 4600
City, State, Zip:	Oklahoma City, OK 73102	City, State, Zip:	Houston, TX 77002

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the certified list of wells is true to the best of my knowledge and belief.

Additionally, by signing below, LIME ROCK RESOURCES II-A, L.P. certifies that it has read and understands the following synopsis of applicable rules.

Previous Operator		New Operator	
Signature:		Signature:	C. J. Miller
Printed Name:	David S. Frank	Printed Name:	C. Tim Miller
Title:	David S. Frank – Attorney-in-Fact	Title:	Chief Operating Officer
Date:	12/09/2010	Date:	12/17/10
Phone:	(405)-552-7881	Phone:	713 292 9514

NMOCD Approval
Electronic Signature: Randy Dade, District 2
Date: December 27, 2010

Lime Rock Resources II-A, L.P. assumes operations of the attached list effective 12/09/2010.

LIME ROCK RESOURCES II-A, L.P. certifies that all below-grade tanks constructed and installed prior to June 16, 2008 associated with the selected wells are in compliance with 19.15.17 NMAC, have been closed pursuant to 19.15.17.13 NMAC, or have been retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.

LIME ROCK RESOURCES II-A, L.P. understands that the OCD's approval of this operator change:

1. constitutes approval of the transfer of the permit for any permitted pit, below-grade tank or closed-loop system associated with the selected wells; and
2. constitutes approval of the transfer of any below-grade tanks constructed and installed prior to June 16, 2008 associated with the selected wells, regardless of whether the transferor has disclosed the existence of those below-grade tanks to the transferee or to the OCD, and regardless of whether the below-grade tanks are in compliance with 19.15.17 NMAC.

As the operator of record of wells in New Mexico, LIME ROCK RESOURCES II-A, L.P. agrees to the following statements:

1. I am responsible for ensuring that the wells and related facilities comply with applicable statutes and rules, and am responsible for all regulatory filings with the OCD. I am responsible for knowing all applicable statutes and rules, not just the rules referenced in this list. I understand that the OCD's rules are available on the OCD website under "Rules," and that the Water Quality Control Commission rules are available on the OCD website on the "Publications" page.
2. I understand that if I acquire wells from another operator, the OCD must approve the operator change before I begin operating those wells. See 19.15.9.9.B NMAC. I understand that if I acquire wells or facilities subject to a compliance order addressing inactive wells or environmental cleanup, before the OCD will approve the operator change it may require me to enter into an enforceable agreement to return those wells to compliance. See 19.15.9.9.C(2) NMAC.
3. I must file a monthly C-115 report showing production for each non-plugged well completion for which the OCD has approved an allowable and authorization to transport, and injection for each injection well. See 19.15.7.24 NMAC. I understand that the OCD may cancel my authority to transport from or inject into all the wells I operate if I fail to file C-115 reports. See 19.15.7.24.C NMAC.
4. I understand that New Mexico requires wells that have been inactive for certain time periods to be plugged or placed on approved temporary abandonment. See 19.15.25.8 NMAC. I understand the requirements for plugging and approved temporary abandonment in 19.15.25 NMAC. I understand that I can check my compliance with the basic requirements of 19.15.25.8 NMAC by using the "Inactive Well List" on OCD's website.
5. I must keep current with financial assurances for well plugging. I understand that New Mexico requires each state or fee well that has been inactive for more than two years and has not been plugged and released to be covered by a single-well financial assurance, even if the well is also covered by a blanket financial assurance and even if the well is on approved temporary abandonment status. See 19.15.8.9.C NMAC. I understand that I can check my compliance with the single-well financial assurance requirement by using the "Inactive Well Additional Financial Assurance Report" on the OCD's website.
6. I am responsible for reporting releases as defined by 19.15.29 NMAC. I understand the OCD will look to me as the operator of record to take corrective action for releases at my wells and related facilities, including releases that occurred before I became operator of record.
7. I have read 19.15.5.9 NMAC, commonly known as "Part 5.9," and understand that to be in compliance with its requirements I must have the appropriate financial assurances in place, comply with orders requiring corrective action, pay penalties assessed by the courts or agreed to by me in a settlement agreement, and not have too many wells out of compliance with the inactive well rule (19.15.25.8 NMAC). <u>If I am in violation of Part 5.9, I may not be allowed to drill, acquire or produce any additional wells, and will not be able to obtain any new injection permits. See 19.15.16.19 NMAC, 19.15.26.8 NMAC, 19.15.9.9 NMAC and 19.15.14.10 NMAC. If I am in violation of Part 5.9 the OCD may, after notice and hearing, revoke my existing injection permits. See 19.15.26.8 NMAC.</u>
8. For injection wells, I understand that I must report injection on my monthly C-115 report and must operate my wells in compliance with 19.15.26 NMAC and the terms of my injection permit. I understand that I must conduct mechanical integrity tests on my injection wells at least once every five years. See

19.15.26.11 NMAC. I understand that when there is a continuous one-year period of non-injection into all wells in an injection or storage project or into a saltwater disposal well or special purpose injection well, authority for that injection automatically terminates. See 19.15.26.12 NMAC. I understand that if I transfer operation of an injection well to another operator, the OCD must approve the transfer of authority to inject, and the OCD may require me to demonstrate the well's mechanical integrity prior to approving that transfer. See 19.15.26.15 NMAC.

9. I am responsible for providing the OCD with my current address of record and emergency contact information, and I am responsible for updating that information when it changes. See 19.15.9.8.C NMAC. I understand that I can update that information on the OCD's website under "Electronic Permitting."
10. If I transfer well operations to another operator, the OCD must approve the change before the new operator can begin operations. See 19.15.9.9.B NMAC. I remain responsible for the wells and related facilities and all related regulatory filings until the OCD approves the operator change. I understand that the transfer will not relieve me of responsibility or liability for any act or omission which occurred while I operated the wells and related facilities.

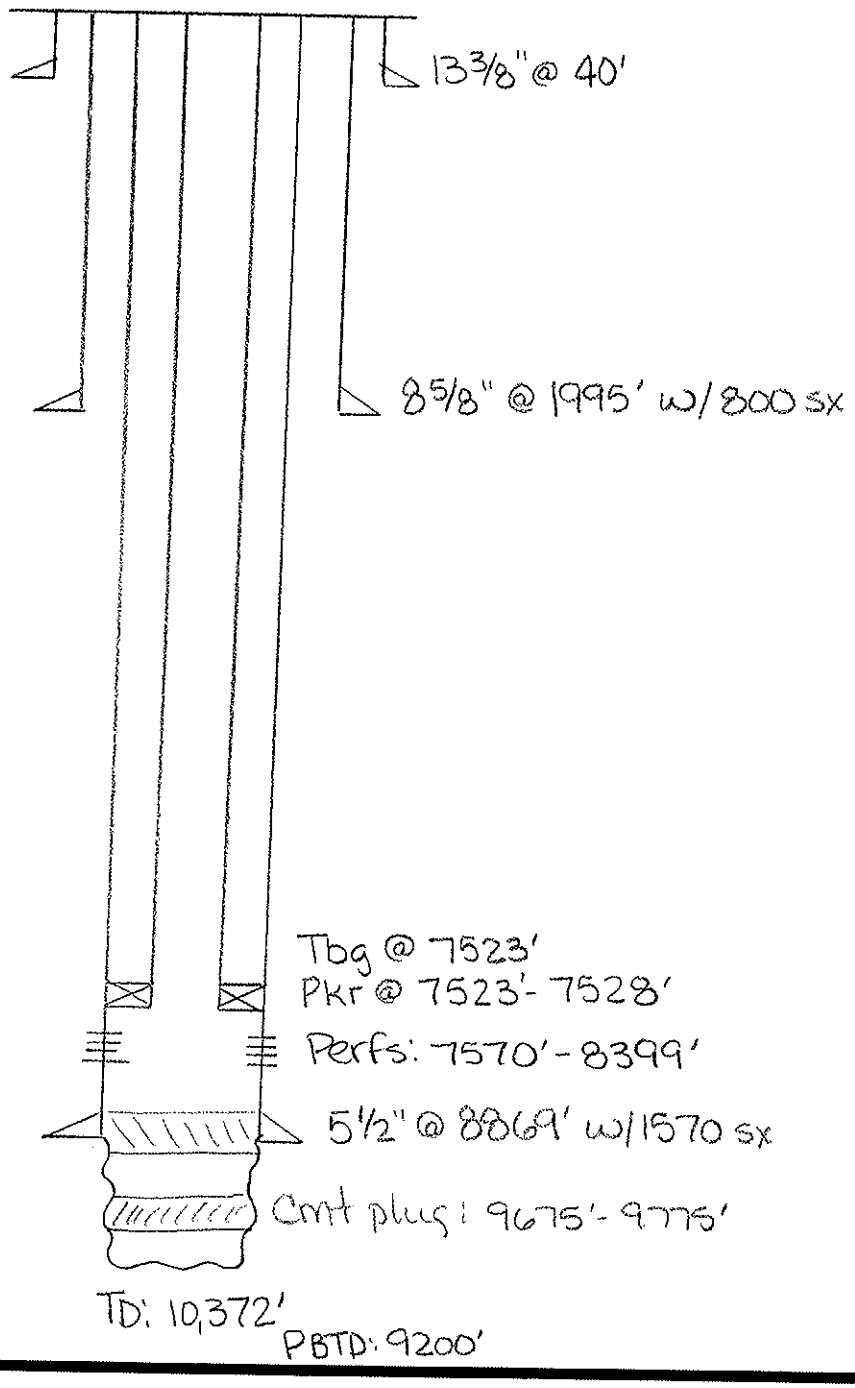
SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 11
Artificial Penetration Review

OPERATOR Navajo Refining Co.
LEASE WDW
WELL NUMBER 2
DRILLED 5-05-99
PLUGGED NA

STATUS Active Injection
LOCATION Sec. 12 -T18S-R27E
MUD FILLED BOREHOLE NA
TOP OF INJECTION ZONE 7270'
API NO. 30-015- 20894

REMARKS: Top of Cement behind 5½" @ surface



Map ID 11

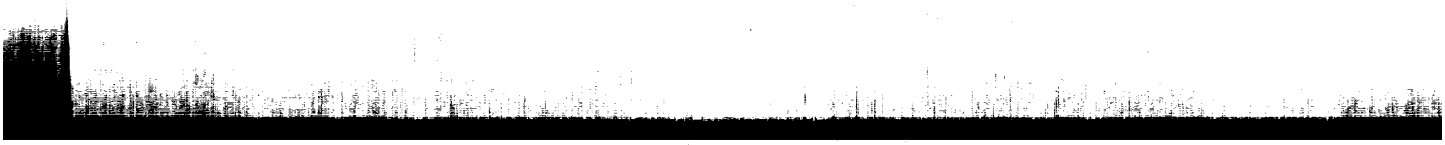
30-015-20894

OGRID 15694

PROP 23592

POOL 96918

Navajo (Injecting) Permo-Penn



9-26-85

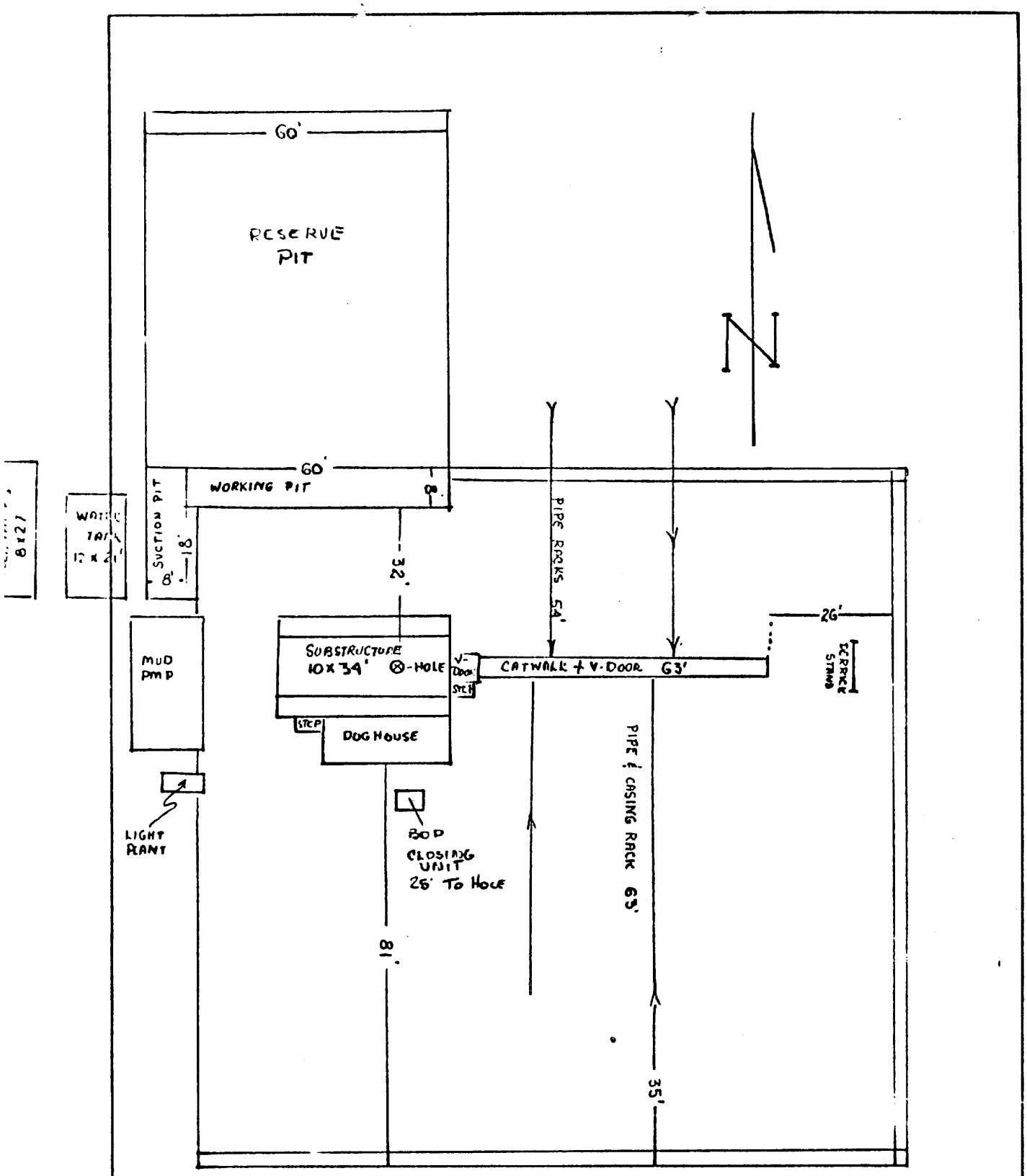
COMPENSATED NEUTRON
GAMMA RAY

SURF - 1768

5-13-99

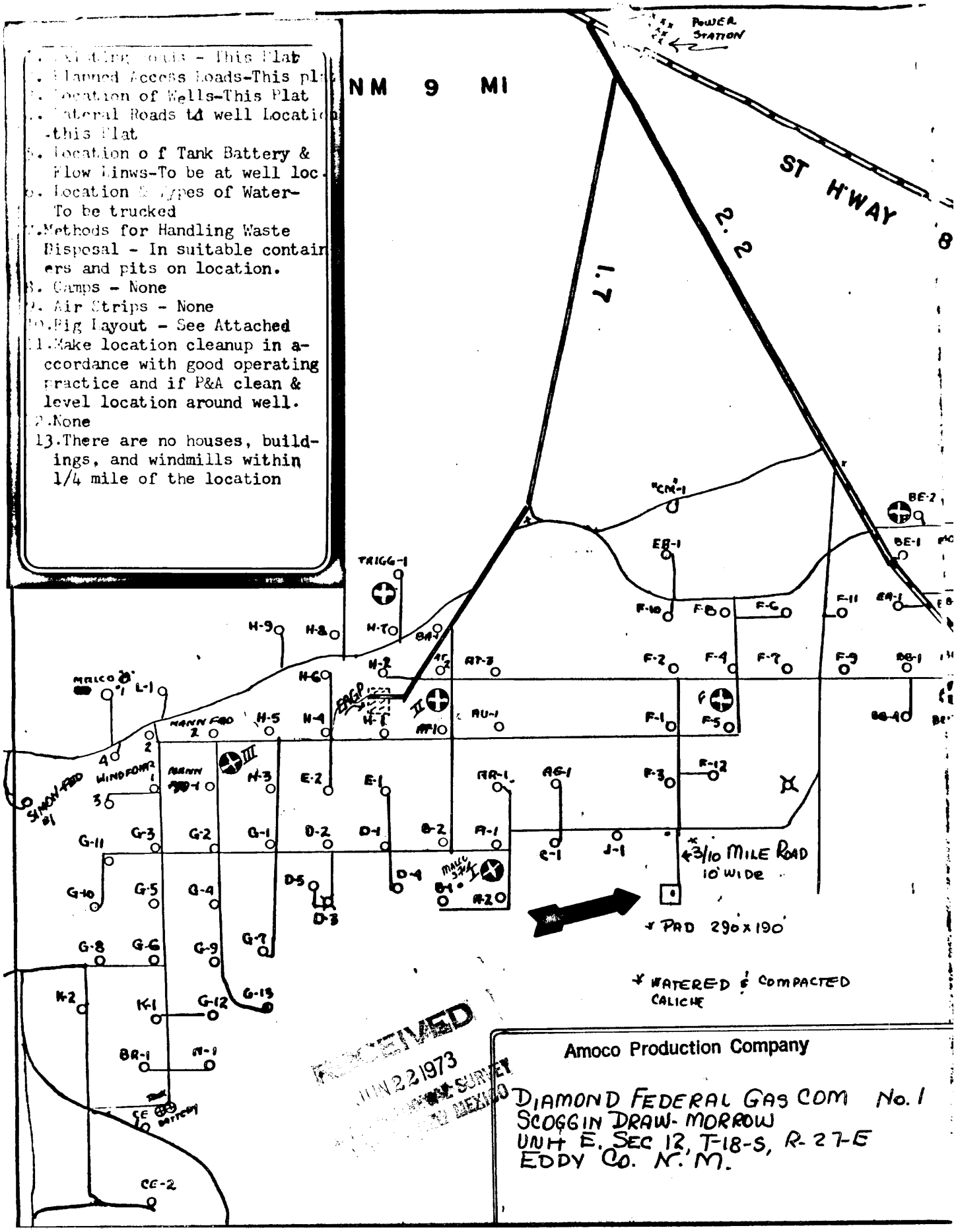
MSG GAMMA COLLAR
CBL LOG

SURF - 1910'



Amoco Production Company	SCALE:
GENERAL RIG LAYOUT	DRG. NO.

1. Existing Roads - This Plat
2. Planned Access Roads-This plat
3. Location of Wells-This Plat
4. Lateral Roads to well Location -this Plat
5. Location of Tank Battery & Flow Linws-To be at well loc.
6. Location & Types of Water- To be trucked
7. Methods for Handling Waste Disposal - In suitable containers and pits on location.
8. Camps - None
9. Air Strips - None
10. Rig Layout - See Attached
11. Make location cleanup in accordance with good operating practice and if P&A clean & level location around well.
12. None
13. There are no houses, buildings, and windmills within 1/4 mile of the location



Amoco Production Company

DIAMOND FEDERAL GAS COM No. 1
SCOGGIN DRAW- MORROW
UNIT E, SEC 12, T-18-S, R-27-E
EDDY Co. N.M.

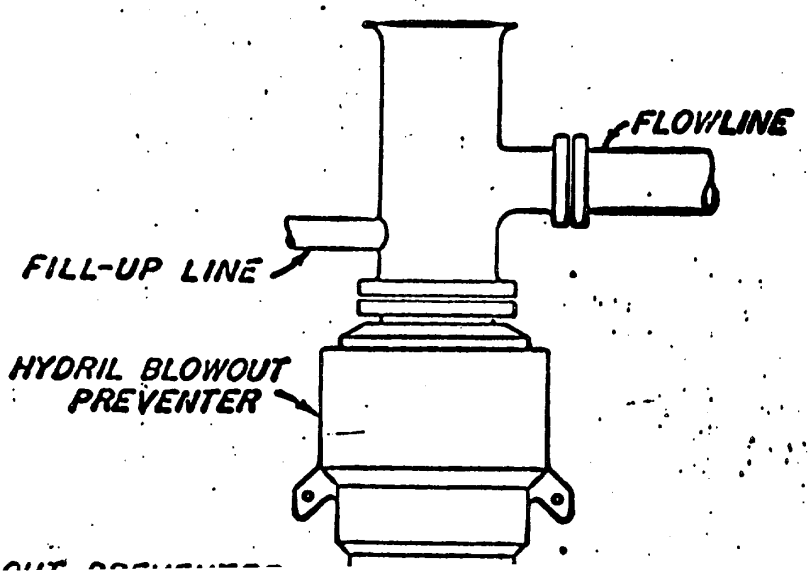
BLOWOUT PREVENTER HOOK-UP FOR DRILLING BELOW INTERMEDIATE CASING

1. BLOWOUT PREVENTERS AND MASTER VALVE TO BE FLUID OPERATED AND ALL FITTINGS MUST BE IN GOOD CONDITION (MINIMUM: WP - 3000 PSI, TEST - 6000 PSI).

2. EQUIPMENT THROUGH WHICH BIT MUST PASS SHALL BE AS LARGE AS THE INSIDE DIAMETER OF CASING THAT IS BEING DRILLED THROUGH.

3. KELLY COCK REQUIRED (MINIMUM: 3000 PSI WP, 6000 PSI TEST)

4. OMSCO OR COMPARABLE SAFETY VALVE MUST BE AVAILABLE ON RIG FLOOR AT ALL TIMES WITH PROPER CONNECTION OR SUB. (MINIMUM: 3000 PSI WP, 6000 PSI TEST)



WELL LOCATION AND ACREAGE DEDICATION PLAT

AMOCO PRODUCTION COMPANY		DIAMOND Federal Gas Com	1
F	12	18 SOUTH	27 EAST	EDDY
1980	NORTH	660	WEST
3676.9'	MORROW	SCOGGIN DRAW MORROW (Gas)	320

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

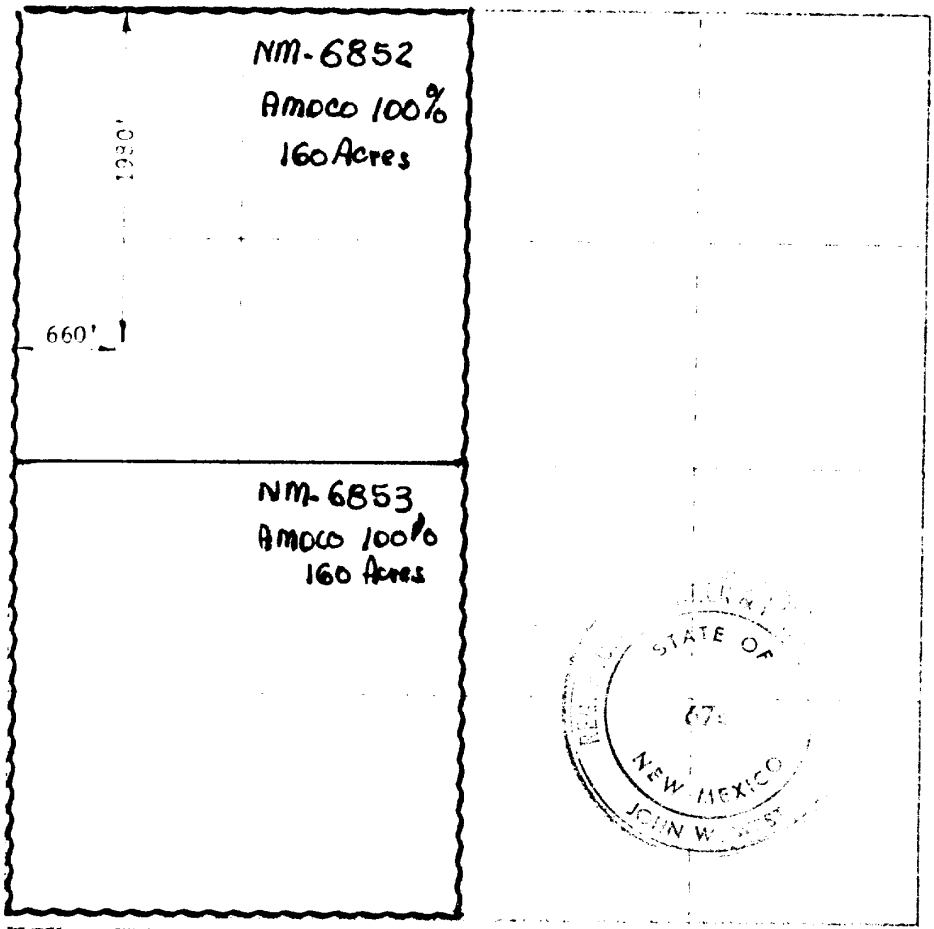
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force pooling, etc?

Yes No If answer is "yes" type of consolidation

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

J. E. York
AREA ENGINEER
Amoco Production Company

JUN 21 1973

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

JUNE 20, 1973

John W. West

drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:

(1) A recording pit level indicator to determine pit volume gains and losses.

(2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.

(3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.

6. When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 150 feet. The volume of mud required to fill the hole shall be watched, and any time there is an indication of swabbing, or influx of formation fluids, proper blowout prevention precautions must be taken. The mud shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running the pipe to bottom.

7. A copy of these requirements shall be posted on the rig floor or in the dog house during the drilling of the well.

James A. Knauf
District Engineer

Lease No. NM-6852
Well Amoco Production Co. 1-Diamond Federal Gas Com.
Drillsite 1980/N 660/W 12-18S-27E
Depth 10,000' Morrow
Approved July 6, 1973

United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Drawer U
Artesia, New Mexico 88210

June 22, 1973

NOTICE

DRILLING WELL CONTROL REQUIREMENTS FOR DEEP WELLS
DRILLED ON FEDERAL OIL AND GAS LEASES
IN THE ARTESIA DISTRICT

The following requirements are established in accordance with 30 CFR 221.24, 221.36, and 221.37. Blowout preventer equipment, choke equipment, drilling fluid characteristics, drilling fluid monitors, and the conduct of drilling procedures shall be such as are necessary to prevent the blowout of any well. In addition to all other applicable rules, regulations, and accepted good operating practices, drilling shall be in accordance with the following safety requirements:

1. After setting the 8-5/8 inch casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report. In addition, the pipe rams and bag-type preventer shall be actuated at least once each 24 hours and the blind rams each time the drill pipe is out of the hole.

2. Accumulators shall maintain a pressure capacity reserve at all times to provide for repeated operation of hydraulic preventers.

3. A drill string safety valve in the open position shall be maintained on the rig floor at all times while drilling operations are being conducted.

4. Blowout prevention drills shall be conducted as necessary to insure that each drilling crew is properly trained to carry out emergency duties.

5. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before

N. M. O. C. C. COPY

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-20894

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM-6852

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ OTHER SINGLE ZONE ☒ MULTIPLE ZONE ☐

RECEIVED JUL 9 1973 O. C. C. ARTESIA, OFFICE

7. UNIT AGREEMENT NAME: DIAMOND FEDERAL GAS COM

8. FARM OR LEASE NAME:

2. NAME OF OPERATOR: Amoco Production Company

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: BOX 68, HOBBS, N. M. 88240

10. FIELD AND POOL, OR WILDCAT: SCOGGIN DRAW-MORROW

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FNL x 660' FWL Sec. 12 (Unit E, SE/4 NW/4)
At proposed prod. zone:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 12-18-27 NMPM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*:

12. COUNTY OR PARISH: EDDY

13. STATE: N.M.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any):

16. NO. OF ACRES IN LEASE:

17. NO. OF ACRES ASSIGNED TO THIS WELL: 320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.:

19. PROPOSED DEPTH: 10,000

20. ROTARY OR CABLE TOOLS: ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3607' GL

22. APPROX. DATE WORK WILL START*: 7-1-73

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8 5/8"	32 ~~24~~#	1000'	Circ.
7 7/8"	4 1/2"	9.5-11.6#	10000'	SUFFICIENT TO FILL 500' ABOVE UPPERMOST PAY.

After drilling well logs will be run and evaluations made, perforating and/or stimulating as necessary in attempting commercial production.

BOP program attached.

Mud Program:
0- 1000' Native mud & water
1000-9000
9000-10000 Min. quality low solids gel for satisfactory operations & samples.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED: J. E. York TITLE: AREA ENGINEER DATE: JUN 21 1973

(This space for Federal or State office use)

PERMIT NO.: APPROVAL DATE: JUL 6 1973

APPROVED BY: [signature] TITLE: DISTRICT ENGINEER DATE: JUL 6 1973

CONDITIONS OF APPROVAL, IF ANY: Subject to attached "Notice" dated 6-22-73

Or 5. USGS-Aer
1- Div
1- SUSP
1- RRY
1- ARCO

*See Instructions On Reverse Side

Copy to SF

RECEIVED
JUL 10 1973
O. C. C.
ARTESIA, OFFICE

P. O. Drawer U
Artesia, New Mexico 88210

July 9, 1973

Mr. Jim York
Amoco Production Company
Post Office Box 68
Hobbs, New Mexico 88240

Dear Mr. York:

This is to confirm my telephone conversation with you today whereby we requested that the 8-5/8-inch casing string be set in the top of the San Andres formation (approximately 2,000 feet below the surface) in your No. 1 Diamond Federal Gas Com. well on lease NM-6852 in the SW¼NW¼ sec. 12, T. 18 S., R. 27 E., N.M.P.M., Eddy County, New Mexico.

Sincerely yours,

(SGD.) JAMES A. KNAUF

James A. Knauf
District Engineer

cc:
Roswell
N.M.O.C.C. (2)

RECEIVED
JUL 10 1973
O. C. C.
ARTESIA, OFFICE

Copy USGS

N. M. O. C. C. COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1424

5. LEASE DESIGNATION AND SERIAL NO.: NM 6952

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER DRILLING

RECEIVED JUL 25 1973 O. C. C. ARTESIA, OFFICE

2. NAME OF OPERATOR: Amoco Production Company

3. ADDRESS OF OPERATOR: BOX 68, HOBBS, N. M. 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1980' FNL x 660' FWL SEC. 12 (UNIT E, SE/4 NW/4)

7. UNIT AGREEMENT NAME: DIAMOND FED. GAS COM

8. FARM OR LEASE NAME:

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: SCOGGIN DRAW-MORROW

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 12-18-27-NMPM

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3607' GL 3623' R.D.B

12. COUNTY OR PARISH: EDDY

13. STATE: N.M.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☒	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Spudding			☒
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Delta Drlg Co. spudded 11" hole 3:PM 7-18-73.
On 7-22-73, 8 5/8" OD 32# 8R K-55 Casing was set
@ 1955 w/ 700Sx Incor 2% Gel + 100 sx neat. Circ. 200 Sx.
After WOC 18 hours, tested casing w/ 500 psi for 30 min.
Test O.K.
Reduced hole to 7 7/8" @ 1955' and resumed drilling.

RECEIVED JUL 24 1973 U. S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED: [signature] TITLE: ADMINISTRATIVE ASSISTANT DATE: JUL 23 1973

(This space for Federal or State office use)

APPROVED: TITLE: DATE:

CONDITIONS OF APPROVAL, IF ANY:

APPROVED JUL 24 1973 H. L. BEEKMAN ACTING DISTRICT ENGINEER

Or 4- USGS-ABQ
1- DIV
1- SUSP
1- RRY
1- ARCO

*See Instructions on Reverse Side

Drawer 1857
Roswell, New Mexico 88201

July 24, 1973

Amoco Production Company
Attention: Mr. Joe W. Durkee
P. O. Box 3092
Houston, Texas 77001

Gentlemen:

Enclosed are three approved copies of communitization agreement No. Com. Agr.-SW-760 involving 320 acres of land in Federal leases New Mexico 6852 and 6853, Eddy County, New Mexico.

The agreement communitizes all rights as to dry gas and associated liquid hydrocarbons producible from the Morrow formation in the W½ sec. 12, T. 18 S., R. 27 E., N.M.P.M., and is effective as of June 20, 1973.

You are requested to furnish all interested principals with appropriate evidence of this approval.

Sincerely yours,

CARL C. TRAYWICK
Acting Area Oil and Gas Supervisor

cc:
BLM, Santa Fe (w/cy agr.)
Artesia (w/cy agr.)
Rondeau

JMonro:lb

N. M. O. C. C. COPY

Copy to SF

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: NM-6852

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

RECEIVED

7. UNIT AGREEMENT NAME: DIAMOND FED. GAS COM

8. FARM OR LEASE NAME:

2. NAME OF OPERATOR: Amoco Production Company

SEP 24 1973

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: BOX 68, HOBBS, N. M. 88240

O.C.C.
ARTESIA, OFFICE

10. FIELD AND POOL, OR WILDCAT: SCOGGIN DRAW-MORROW

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 1980' FNL x 660' FWL Sec 12. (Unit E, SE/4 NW/4)
At top prod. interval reported below
At total depth

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 12-18-27 NMPM

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: EDDY | 13. STATE: N.M.

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
7-18-73	8-27-73	P&A	3623' RDB	—

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
10,372	P&A		→	0-TD	—

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: NONE

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: GR-N - DUAL IND LL

27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8	32#	1955	11"	800 sx	NONE

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

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SEP 19 1973
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

posted 9-13-74

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Ray L. Yokum TITLE ADMINISTRATIVE ASSISTANT DATE 9-10-73

*(See Instructions and Spaces for Additional Data on Reverse Side)

D+3- USGS-Art
1- W7
1- Div
1- RRY

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
		NO OIL OR GAS	

38. GEOLOGIC MARKERS

	NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
T	ABO	5506	
T	WOLFCAMP	6728	
T	CISCO	7485	
T	STRAWN	8820	
T	ATOKA	9460	
T	MORROW	9725	
T	CHESTER	10158	
T	MISS LM	10338	

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

N. M. O. C. C. COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1424

5. LEASE DESIGNATION AND SERIAL NO.: NM-0[illegible]02

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER DRILLING - DRY HOLE

7. UNIT AGREEMENT NAME: DIAMOND FEDERAL COM

2. NAME OF OPERATOR: Amoco Production Company

RECEIVED

8. FARM OR LEASE NAME:

3. ADDRESS OF OPERATOR: BOX 68, HOBBS, N. M. 88240

SEP 12 1973

9. WELL NO.: 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1980' FNL x 660' FWL Sec. 12 (Unit E, SE/4 NW/4)

O. C. C. ARTESIA, OFFICE

10. FIELD AND POOL, OR WILDCAT: SCOGGIN DRAW MORROW

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 12-18-22 NMPM

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3623 R.D.B.

12. COUNTY OR PARISH: EDDY 13. STATE: N.M.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☒	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drilled to a TD of 10,372' without encountering oil or Gas. Logs and evaluations confirmed Dry Hole.

* Propose to P+A as follows: Cement Plugs - Class H

INTERVAL	LENGTH	FORMATION	Sx CEMENT
9775-9675'	100'	MORROW	45
7535-7435'	100'	GISCO	50
5556-5456'	100'	ABO	40
3720-3620'	100'	YESO	50
2045-1945'	100'	8 5/8" CSA 1995	40
Surface	10-20'	Erect P+A Marker	10 sx

All intervals to be filled w/ Dry mud.
Location to be cleaned & levelled.

RECEIVED
SEP-4 1973
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

* Pursuant to Mr. Leon Beekmans verbal approval 8-23-73.

18. I hereby certify that the foregoing is true and correct

SIGNED _____ TITLE AREA ENGINEER DATE AUG 3 1973

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
SEP 11 1973
R. L. BEEKMAN
ACTING DISTRICT ENGINEER

0+4 USGS-Art
1-Div
1-Susp
1-Rev
1-Arco

*See Instructions on Reverse Side

N. M. O. C. C. copy

Form 9-331 (May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED

1. OIL WELL ☐ GAS WELL ☐ OTHER DRY HOLE

SEP - 6 1974

2. NAME OF OPERATOR: Amoco Production Company

3. ADDRESS OF OPERATOR: BOX 68, HOBBS, N. M. 88240

O. C. C.

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface: 1980' FNL & 660' FWL Sec. 12 (UNIT E, SE/4 NW/4)

5. LEASE DESIGNATION AND SERIAL NO.: NM-6852

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: DIAMOND FED. GAS COM

8. FARM OR LEASE NAME:

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: SCOGGIN DRAW-MORROW

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 12-18-27 NMPM

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3623' R.D.B.

12. COUNTY OR PARISH: EDDY

13. STATE: NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☒
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Physical abandonment of well concluded 8-31-73.
Plugged and abandoned as follows:

Sx CEMENT	INTERVAL	LENGTH	FORMATION
45	9775-9765	100'	MORROW
50	7535-7435	100'	CISCO
40	5556-5456	100'	ABO
50	3720-3620	100'	YESO
40	2045-1945	8 5/8" CSA 1995 - circ.	
10	Surface & erected P&A marker.		

All intervals filled w/ mud.
Location to be cleaned & levelled.

RECEIVED SEP - 5 1973 U.S. GEOLOGICAL SURVEY ARTESIA

18. I hereby certify that the foregoing is true and correct

SIGNED Loy R. Goodson TITLE ADMINISTRATIVE ASSISTANT DATE SEP 5 1973

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED SEP 6 1974 R. L. BEEKMAN ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

Or 4- USGS Alt
1- Div
1- Susp
1- RRI
1- ARCO

EXHIBIT "D"
SKETCH OF WELL PAD

FRED POOL DRILLING, INC.
Well #2 Chukka Federal
SW¼NW¼, Sec. 12: T-18-S, R-27-E

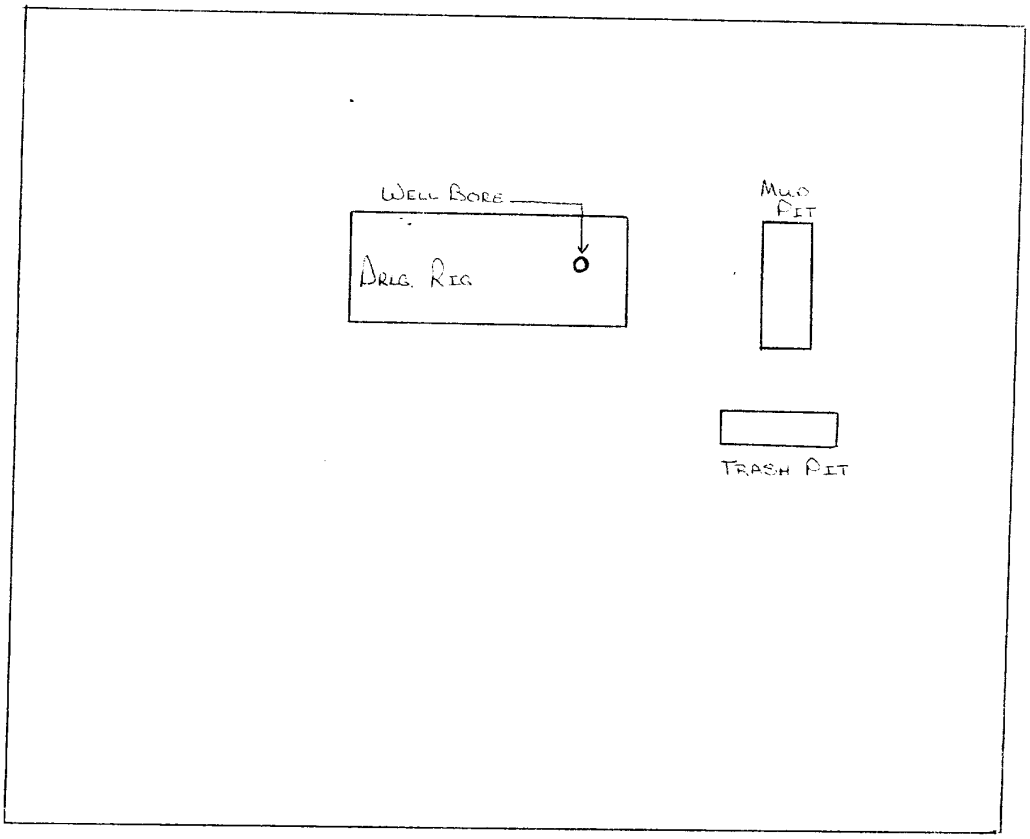
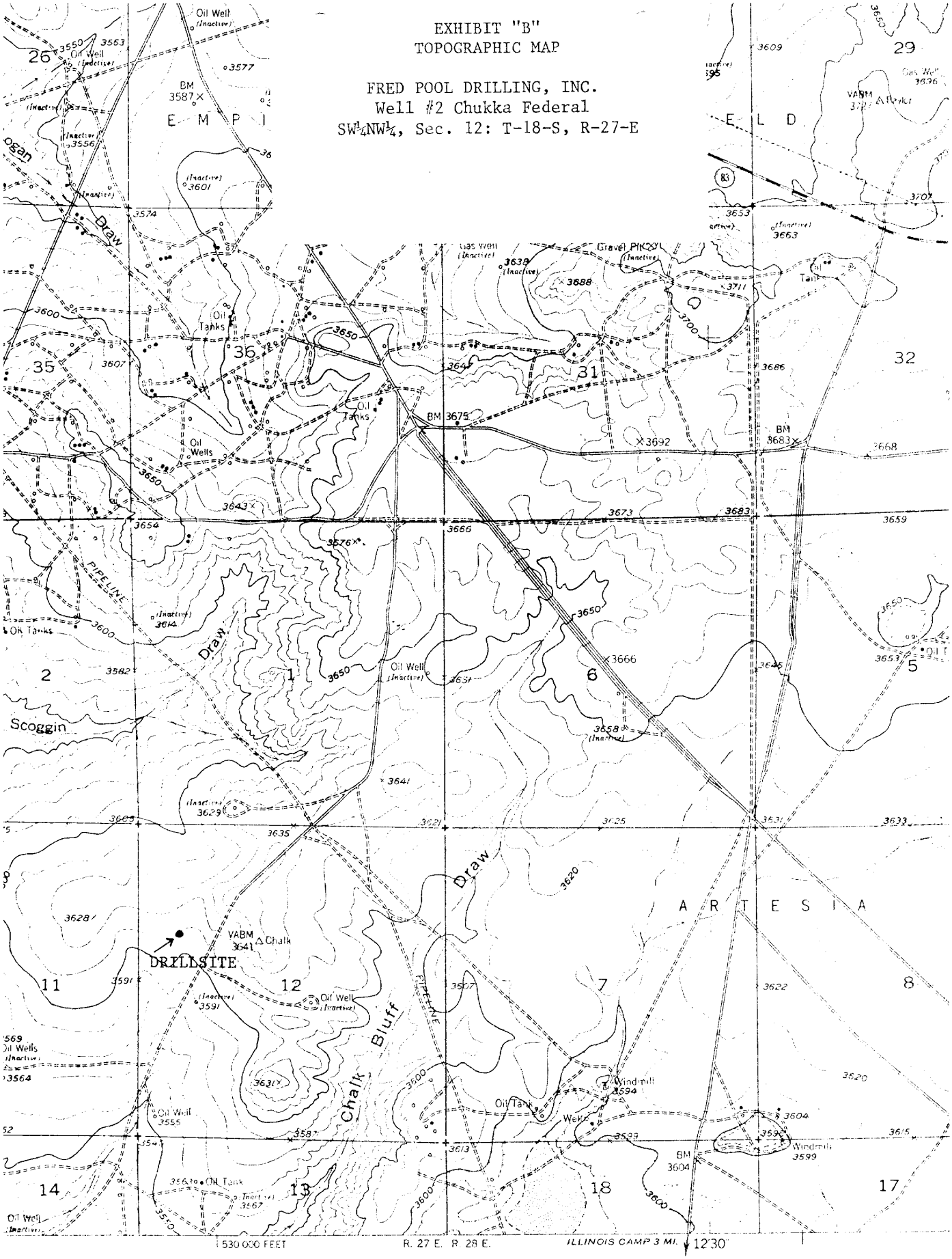


EXHIBIT "B"
TOPOGRAPHIC MAP

FRED POOL DRILLING, INC.
Well #2 Chukka Federal
SW¼NW¼, Sec. 12: T-18-S, R-27-E



SUPPLEMENTAL DRILLING DATA

FRED POOL DRILLING, INC.
WELL #2 CHUKKA FEDERAL
SW¼NW¼, SEC. 12, T-18-S, R-27-E
EDDY COUNTY, NEW MEXICO

1. SURFACE FORMATION: Artesia Group of Permian Age. (Elev. 3607')

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Yates	275'	Grayberg	1650'
Seven Rivers	475'		
Queen	1225'		

3. ANTICIPATED POROSITY ZONES:

Water - Above 300'
Oil - 1500-2500'

4. CASING DESIGN:

Size	Interval	Weight	Grade	Joint
8 5/8"	0 - 2000'	32#		

5. SURFACE CONTROL EQUIPMENT: Control head.

6. CIRCULATING MEDIUM: KCL water.

7. AUXILIARY EQUIPMENT: None considered necessary on this shallow development well.

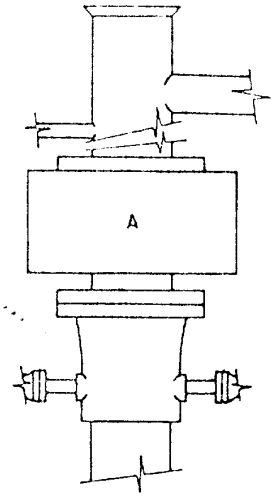
8. TESTING, LOGGING AND CORING PROGRAM: No coring or DST's are planned. Electric logs will include an cement bond log and a Compensated Neutron Log with Gamma Ray.

9. ABNORMAL PRESSURES, TEMPERATURES OR GASES: None anticipated.

10. ANTICIPATED STARTING DATE: It is planned that operations will commence about August 31, 1985. Duration of drilling, completion and testing operations should be one to five days.

11. RE-ENTRY DETAILS: Drill out cement plug at top of casing. Clean hole to plug at 1945' with tubing. Pressure test casing to be sure it does not leak. Run cement bond log from 1945' to surface. Perforate the Penrose section from 1450' to 1470' acidize and swab test.

BLOWOUT PREVENTER ARRANGEMENT
FRED POOL DRILLING, INC.
WELL #2 CHUKKA FEDERAL
SW¼NW¼, Sec. 12, T-18-S, R-27-E
EDDY COUNTY, NEW MEXICO



ARRANGEMENT A

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISIO

P. O. BOX 2088
SANTA FE, NEW MEXICO 37501

Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
Fred Pool Drilling, Inc.	Chukka Federal	2

Unit Letter	Section	Township	Range	County
E	12	18-S	27-E	Eddy

Actual Footage Location of Well: 1980 feet from the North line and 660 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3607		Artesia	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

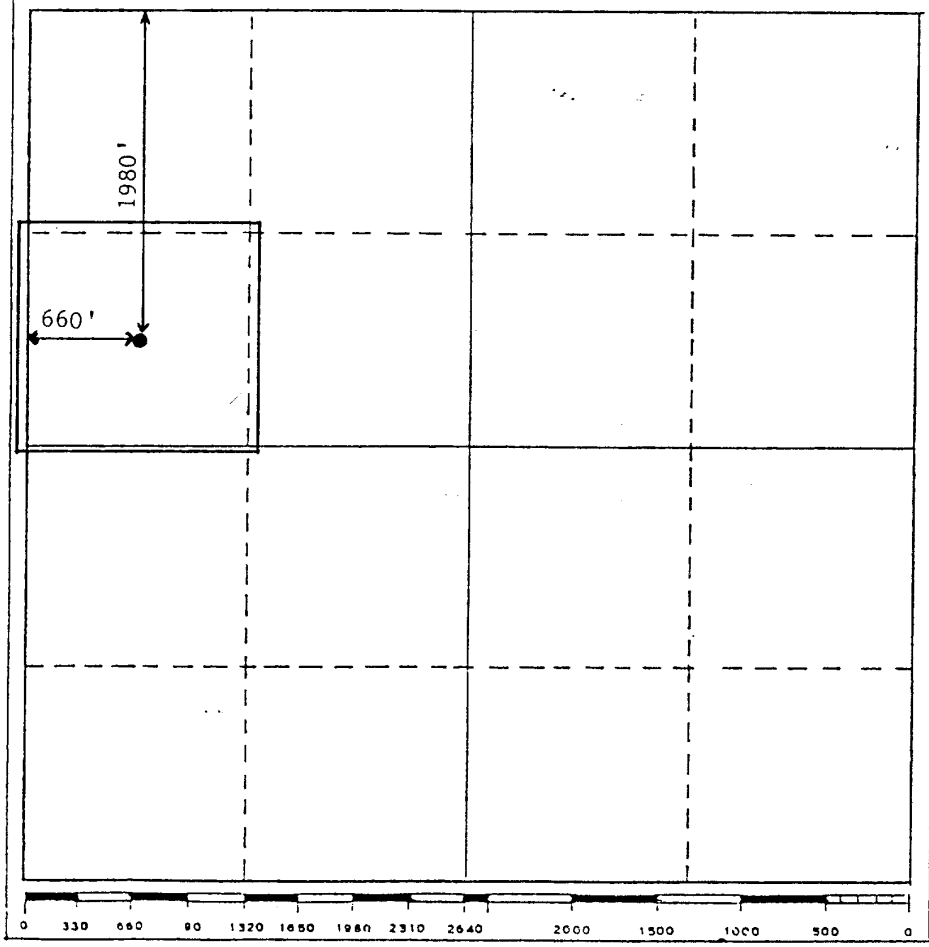
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☒ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: Fred Pool Jr.

Position: President

Company: Fred Pool Drilling, Inc.

Date: 8-16-85

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

Form 9-331 C
(May 1963)

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

RECEIVED BY
AUG 30 1985
O. C. D.
ARTESIA, OFFICE

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-20894

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER Reentry SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Fred Pool Drilling, Inc.

3. ADDRESS OF OPERATOR: P. O. Box 1393, Roswell, N.M. 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FNL & 660' FWL
At proposed prod. zone: (Unit E) (SW¼NW¼)

5. LEASE DESIGNATION AND SERIAL NO.: NM-6852

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Chukka Federal

9. WELL NO.: 2

10. FIELD AND POOL, OR WILDCAT: Artesia ~~Oil Pool~~ Q-G-SA

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 12, T-18-S, R-27-E

12. COUNTY OR PARISH: Eddy

13. STATE: NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 11 air miles east-southeast of Artesia, N.M.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 660'

16. NO. OF ACRES IN LEASE: 160

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 1650'

19. PROPOSED DEPTH: 1945'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3607 GR

22. APPROX. DATE WORK WILL START*: 8-31-85

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
~~11"~~ 12¼" PID	8 5/8"	32#	2000	Circ.
Csg. in place				

This is a re-entry of Diamond Fed. Gas Com #1 plugged and abandoned 8-31-73.

OTD: 10,372

Attached are:
1) Well location & acreage dedication plat
2) Supplemental drilling data
3) Surface use plan
4) Designation of operator
5) Original approved application by Amoco Production Co. for Diamond Federal Gas Com #1

Posted 101 & NL 9-13-85

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Fred Pool Jr. TITLE President DATE 8-16-85

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY Orig. Sgd. [illegible] TITLE _____ DATE 8-29-85

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

C/SF

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED BY
SEP 11 1985
O. C. D.
ARTESIA, OFFICE

5. LEASE DESIGNATION AND SERIAL NO.: NM 6852

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1. OIL WELL [XX] GAS WELL [ ] OTHER

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: FRED POOL DRILLING, INC.

8. FARM OR LEASE NAME: Chukka Federal

3. ADDRESS OF OPERATOR: P.O.Box 1393 Roswell, N.M. 88201

9. WELL NO.: 2

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1980 ~~Ø~~N L 660 FWL
Unit E SW¼ NW¼

10. FIELD AND POOL, OR WILDCAT: Artesia ~~Oil Pool~~ 9-6-85

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec.12-T 18S- R 27E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3607 GR

12. COUNTY OR PARISH: Eddy

13. STATE: NM

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			
(Other)							

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

9-5-85: Drilled cement out of surface from 0-30 ft.
Stringers of cement to 50 ft.
Tagged No. 2 plug at 1912 ft. Pulled tubing back to 1804 ft.; circulated hole with fresh water.
Preparing to log and perforate well.

SEP 09 1985

18. I hereby certify that the foregoing is true and correct

SIGNED Senta Gail TITLE Clerk DATE 9-6-85

(This space for Federal or State office use)

APPROVED BY ACCEPTED FOR RECORD TITLE DATE
CONDITIONS OF APPROVAL, IF ANY:

SEP 10 1985

*See Instructions on Reverse Side

CARLSBAD, NEW MEXICO

Form 3-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

NM OIL CONS. COMM.
Drawer DD
Artesia, NM 88210

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
NM 6852

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED BY
SEP 18 1985
O. C. D.
ARTESIA, OFFICE

1. OIL WELL [X] GAS WELL [ ] OTHER re-entry

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
Fred Pool Drilling, Inc.

8. FARM OR LEASE NAME
Chukka Federal

3. ADDRESS OF OPERATOR
P.O.Box 1393 Roswell, N.M. 88201

9. WELL NO.
2

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1980 FNL 660 FWL Unit E
SW¼ NW¼

10. FIELD AND POOL, OR WILDCAT
Artesia Oil Pool

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec, 12-T18S-R27E

14. PERMIT NO.
3001520894

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3607 GR

12. COUNTY OR PARISH
Eddy

13. STATE
NM,

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]
(Other)			[ ]

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOTING OR ACIDIZING	[X]	ABANDONMENT*	[ ]
(Other)			[ ]

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

September 8,1985

Perforations: 1446-56 ft. and 1459-62
14 shots.
Acidized with 1000 gallons NE 15%; and30,000 gallons Versagel; 30,000# 20/40 sand and 12,000 # 10/20 sand.

Pumping well back to test.

RECEIVED
SEP 23 1985

18. I hereby certify that the foregoing is true and correct

SIGNED Senta Pool TITLE Vice - president DATE 9-11-85

(This space for Federal or State office use)

APPROVED BY ACCEPTED FOR RECORD TITLE DATE
CONDITIONS OF APPROVAL, IF ANY:

SEP 16 1985

*See Instructions on Reverse Side

CARLSBAD, NEW MEXICO

Drawer DD
Artesia, NM 88210

Form 9-330
(Rev. 5-63)

RECEIVED BY
SEP 23 1985
ARTESIA, OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other RE-entry

b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other

2. NAME OF OPERATOR: Fred Pool Drilling, Inc.

3. ADDRESS OF OPERATOR: P.O.Box 1393 Roswell, N.M.88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 1980 FNL660 FWL SW¼ NW¼ Unit E
At top prod. interval reported below 1446- ft.
At total depth 1912 ft.

5. LEASE DESIGNATION AND SERIAL NO.: NM 6852

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Chukka Federal

9. WELL NO.: 2

10. FIELD AND POOL, OR WILDCAT: Artesia ~~Oil Pool~~

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 12-T18S-R27E

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
3001520894	9-30-85	Eddy	NM

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
8-30-85	9-6-85	9-10-85	3607 GR	3607 GR

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
1912 ft.	1912 ft		→	x	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
1446-1462 ft.
Penrose

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Compensated Neutron

27. WAS WELL CORED: no

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8	32#	2000	11"	circulated	0

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8	1804 ft.	

31. PERFORATION RECORD (Interval, size and number)
1446-56 ft.
1459-62 ft. 14 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
1446-56	1000 gal. NE 15%, 30,000 gal. Versagel; 30,000 # 20/40 sand;12,000# 10/20 sand.
1459-62	

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
9-12-85	Pumping	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
9-12-85	24	none	→	31	TSTM	0	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
40#	40#	→	31	TSTM	0	35

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): vented

TEST WITNESSED BY: Fred Pool, Jr.

ACCEPTED FOR RECORD
SEP 19 1985
CARLSBAD, NEW MEXICO

35. LIST OF ATTACHMENTS: Compensated Neutron log, mailed 9-10-85

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Sherita Pool TITLE Vice President DATE 9-13-85

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
	0	65	Caliche and red bed
	65	1100	Salt, red bed and anhydrite.
	1100	1365	Dolomite and anhydrite
Queen & Grayburg	1365	1570	Sand dolomite
TD	1570	1912	dolomite

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

Form C-104
Revised 10-1-78

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

No. of copies received		
DISTRIBUTION		
SANTA FE	✓	
FILE	✓	✓
U.S.G.S.		
LAND OFFICE		
TRANSPORTER OIL	✓	
TRANSPORTER GAS	✓	
OPERATOR	✓	
PRORATION OFFICE		

RECEIVED BY
SEP 18 1985
O. C. D.
ARTESIA, OFFICE

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator: Fred Pool Drilling, Inc.

Address: P.O. Box 1393 Roswell, N.M. 88201

Reason(s) for filing (Check proper box)

New Well [X] Re-entry
Recompletion [ ]
Change in Ownership [ ]

Change in Transporter of:
Oil [ ] Dry Gas [ ]
Casinghead Gas [ ] Condensate [ ]

Other (Please explain)
CASINGHEAD GAS MUST NOT BE FLARED AFTER 10-24-85 UNLESS AN EXCEPTION FROM THE B. L. M. IS OBTAINED

If change of ownership give name and address of previous owner

I. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease (State, Federal or Fee)	Lease
Chukka Federal	2	Artesia ~~Oil Pool~~	Federal	6852

Location

Unit Letter E ; 1980 Feet From The North Line and 660 Feet From The West

Line of Section 12 Township 18S Range 27E , NMPM, Eddy County

II. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [X] or Condensate [ ]	Address (Give address to which approved copy of this form is to be sent)
Navajo Crude Oil Purchasing	Box 159 Artesia, N.M. 88210
Name of Authorized Transporter of Casinghead Gas [X] or Dry Gas [ ]	Address (Give address to which approved copy of this form is to be sent)
Phillips Petroleum	Bartlesville, Okla.

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	E	12	18S	27E	no	

If this production is commingled with that from any other lease or pool, give commingling order number:

COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. R
	X			X				X

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
8-30-85	9-10-85	1912 ft.	1912 ft.
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
GR 3607	Penrose	1446 ft.	1804
Perforations			**Depth Casing Shoe**
1446-56 1459-62			–

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
11"	8 5/8	300	[illegible]
	4 1/2	1804	

Post ID-2
9-27-85
Comp.

V. TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
9-12-85	9-12-95	pumping	
Length of Test	**Tubing Pressure**	**Casing Pressure**	**Choke Size**
24 hrs.	40#	40#	none
Actual Prod. During Test	**Oil-Bbls.**	**Water-Bbls.**	**Gas-MCF**
31 bbls	31	0	TSTM

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
TSTM	24hrs.	TSTM	–
Testing Method (pitot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
			none

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION DIVISION

APPROVED SEP 24 1985, 19

BY Original Signed By
Les A. Clements
Supervisor, District II

Renta Pool
(Signature)

Vice President
(Title)

9-16-85
(Date)

TITLE Supervisor, District II

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deep well, this form must be accompanied by a tabulation of the devia tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for al able on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of ow well name or number, or transporter, or other such change of condit

Separate Forms C-104 must be filed for each pool in mult completed wells.

FRED POOL, JR.

P. O. Box 1393
Roswell, NM 88201

September 25,1985

New Mexico Energy and Resources Board
P.O.Box 2088
Santa Fe, N.M. 87501

RE: Chukka Federal No. 2
Lease No. 6852
SW/4 NW/4 Sec. 12-18S-27E
Eddy County,N.M.

Gentlemen,

Please be advised that the above well was spudded on 8-3-85 and completed as a producing well on September 10,1985. This well was potentialed at 31 barrels per day of oil and gas was TSTM.

All necessary records and logs have been filed with the appropriate offices.

Sincerely,

Penta Pool

Penta Pool

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

Drawer DD Artesia, NM.

DISTRICT OFFICE #2

Sept. thru Dec. 1985

NO. 2058 N

SUPPLEMENT TO THE OIL PRORATION SCHEDULE

DATE September 24, 1985

PURPOSE ALLOWABLE ASSIGNMENT - NEW OIL

Effective September 12, 1985 an allowable of 31 barrels of oil per day is hereby assigned to Fred Pool Drilling, Incorporated, Chukka Federal #2-E-12-18-27 in the Artesia Queen Grayburg San Andres Pool.

L - F

MP - P

Sept. Total - 589 bbls.
Oct. Total - 961 bbls.
Nov. Total - 930 bbls.
Dec. Total - 961 bbls.

Form. - Penrose
Perfs. - 1446' - 1462'
Comp. - 9-10-85
TD - 1912'

LAC:fc

Fred Pool Drlg., Inc.

NRC
PP

OIL CONSERVATION DIVISION

Jerry Sexton

DISTRICT SUPERVISOR

DISTRIBUTION: WHITE-OPERATOR, GREEN-TRANSPORTER, CANARY-OCC SANTA FE, PINK-OFFICE COPY, GOLDENROD-EXTRA COPY

Form 3160-5
(November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
OCT 19 '90
O. C. D.
ARTESIA, OFFICE

1. OIL WELL [X] GAS WELL [ ] OTHER

2. NAME OF OPERATOR: THE EASTLAND OIL COMPANY

3. ADDRESS OF OPERATOR: P. O. DRAWER 3488, MIDLAND, TX 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface
UNIT LETTER E, 1980 FT. FNL AND 660 FWL, SECTION 12, TS 18S, RG. 27E, EDDY CO., NM

5. LEASE DESIGNATION AND SERIAL NO.: NM 6852

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: CHUKKA FEDERAL

9. WELL NO.: 2

10. FIELD AND POOL, OR WILDCAT: ARTESIA Q-G-SA

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SEC. 12, TWP 18S, RGE. 27E

14. PERMIT NO.: 30-015-20894

15. ELEVATIONS (Show whether DF, RT, GR, etc.):

12. COUNTY OR PARISH: EDDY

13. STATE: NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other) CHANGE OF OPERATOR			[X]
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

LEASE PURCHASED FROM FRED POOL DRILLING, INC. 09/01/90.

RECEIVED
OCT 17 11 09 AM '90
CARLSBAD AREA

18. I hereby certify that the foregoing is true and correct

SIGNED Travis Reed TITLE PRODUCTION SUPERINTENDENT DATE 10/11/90

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

RECEIVED
OCT 18 '90
O. C. D.
ARTESIA, OFFICE

Form C-104
Revised 1-1-89
See Instructions
at Bottom of Page

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator: THE EASTLAND OIL COMPANY	Well API No.: 30-015-20894
Address: P. O. DRAWER 3488, MIDLAND, TEXAS 79702	

Reason(s) for Filing (Check proper box)
- New Well [ ]
- Recompletion [ ]
- Change in Operator [X]
- Other (Please explain) [ ]

Change in Transporter of:
- Oil [ ] Dry Gas [ ]
- Casinghead Gas [ ] Condensate [ ]

EFFECTIVE 09/01/90

If change of operator give name and address of previous operator: FRED POOL DRILLING, INC., P. O. DRAWER 1393, ROSWELL, NM 88201

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
CHUKKA FEDERAL	2	ARTESIA Q-G-SA	~~State~~, Federal ~~Fee~~	6852

Location: Unit Letter E : 1980 Feet From The North Line and 660 Feet From The West Line

Section 12 Township 18S Range 27E, NMPM, EDDY County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [XX] or Condensate [ ]: NAVAJO CRUDE OIL PURCHASING	Address (Give address to which approved copy of this form is to be sent): BOX 159, ARTESIA, NM 88210
Name of Authorized Transporter of Casinghead Gas [X] or Dry Gas [ ]: PHILLIPS PETROLEUM	Address (Give address to which approved copy of this form is to be sent): BARTLESVILLE, OK

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When ?
	E	12	18S	27E	NO	

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
Perforations			Depth Casing Shoe

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas- MCF

Posted ID-3 10-26-90
Chg OP

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pitot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Travis Reed
Signature
TRAVIS REED PRODUCTION SUPERINTENDENT

OIL CONSERVATION DIVISION

Date Approved OCT 23 1990

By ~~ORIGINAL SIGNED BY~~
MIKE WILLIAMS

TRAVIS REED	PRODUCTION SUPERINTENDENT		
Printed Name	Title	Title	SUPERVISOR, DISTRICT II
10/08/90	915/683-6293		
Date	Telephone No.		

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
2) All sections of this form must be filled out for allowable on new and recompleted wells.
3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
4) Separate Form C-104 must be filed for each pool in multiply completed wells.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-101
Revised March 12, 1999

Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APR 1999
RECEIVED
OCD - ARTESIA

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address.	[2] OGRID Number
Navajo Refining Company Post Office Box 159 Artesia, New Mexico 88211	15694
	[3] API Number 30 – 015-20894

[4] Property Code	[5] Property Name	[6] Well No.
23592	WDW	2

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	12	18S	27E		1980	North	660	West	Eddy

[8] Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[9] Proposed Pool 1	[10] Proposed Pool 2
~~Lower Wolfcamp-Cisco-Canyon Injection Zone~~	Navajo Injection; Permo-Penn. 96918

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
E-Reentry	Class I Injection	R	Federal	3607' GR, 3623' KB
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	9200'	Strawn		5/15/99

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
11"	8-5/8"	32 lb/ft	1995 feet	800	Surface
7-7/8"	5-1/2"	17 lb/ft	9200 feet	Caliper vol. +20%	Surface

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Proposed Reentry of The Eastland Oil Company (originally Fred Pool Drilling, Inc.) Chukka Federal No. 2 (PBTD 1912 feet, September 10, 1985) formerly Amoco Production Company Diamond Federal Gas Com. No. 1 (OTD 10,372 feet, P&A August 31, 1973). The well currently produces oil and gas from perforations from 1446 feet to 1462 feet (Penrose.)

Navajo will squeeze the perforations from 1446 feet to 1462 feet, drill out cement plugs, and clean out the well to 9200 feet, set 5-1/2 inch casing at 9200 feet and cement to the surface, perforate porous intervals in the Lower Wolfcamp, Cisco, and Canyon Formations between 7270 feet and 9200 feet, and conducted injectivity tests.

Attached are the Well Location Plat and Drilling Program.

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: Darrell Moore
Printed name: Darrell Moore
Title: Env. Mgr. for Water & Waste
Date: 4/21/99
Phone: 505-748-3311

OIL CONSERVATION DIVISION

Approved by: Steve Gt. Gum. BOX
Title: District Supervisor
Approval Date: 5-3-99
Expiration Date: 5-3-00
Conditions of Approval:
Attached ☐

378\Form C-101.doc

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe. NM 87505

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-20894		Lower Wolfcamp-Cisco-Canyon Injection Zone

[4] Property Code	[5] Property Name	[6] Well Number
	WDW-2	

[7] OGRID No.	[8] Operator Name	[9] Elevation
	Navajo Refining Company	3607' GR

[10] Surface Location

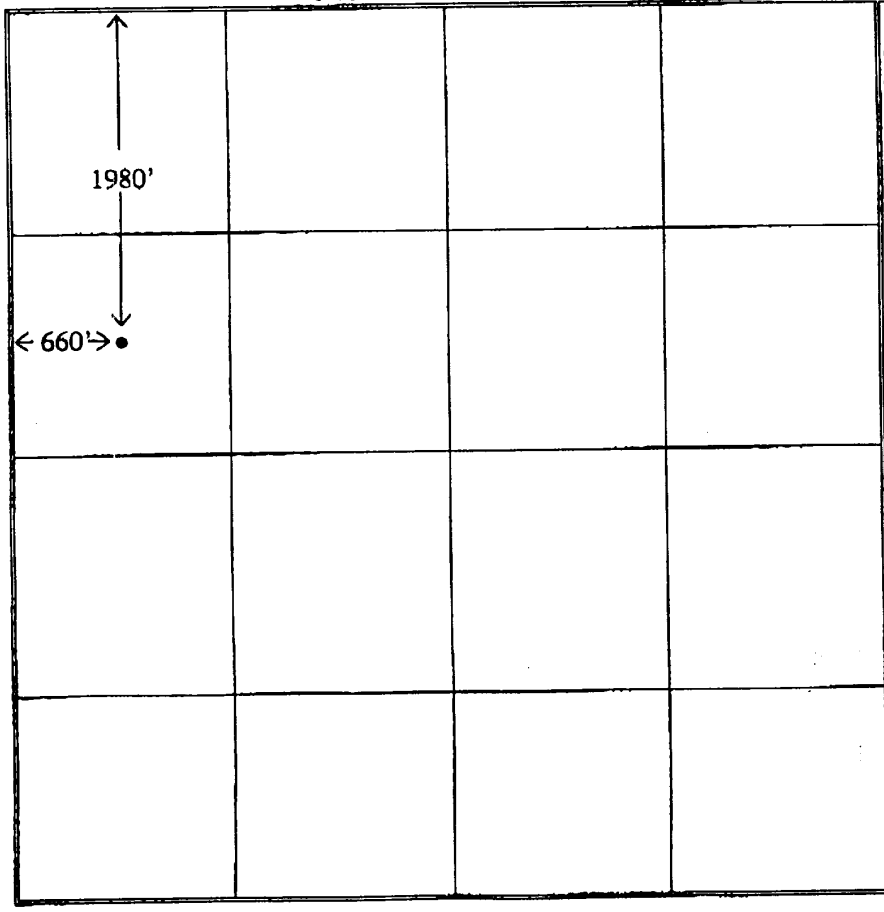
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	12	18S	27E		1980	North	660	West	Eddy

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature: Darrell Moore

Printed Name: Darrell Moore

Title: Env. Mgr. for Water + Waste

Date: 4/21/99

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey

Signature and Seal of Professional Surveyor:

Well is active. Location was not re-surveyed by Navajo.

Certificate Number

378\Form C-102.doc

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505
(505) 827-7133
Fax: (505) 827-8177

(PLEASE DELIVER THIS FAX)

To: TIM GUMM - ARTESIA OCD FAX 748-9720

From: WAYNE PRICE - OCD SF

Date: 4/30/99

Number of Pages (Includes Cover Sheet) 7/6

Message: APPROVED BOND FOR NAVAJO WDW #2

CLASS I INJECTION WELL (COPY)

If you have any trouble receiving this, please call:
(505) 827-7133

NEW MEX O ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

April 19, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z 559 573 590

J.S. Ward & Son, Inc.
104 South Fourth Street
Artesia, New Mexico 88210-2195

Attention: Mr. Gary Sims

Re: Navajo Refining Company Discharge Plan UIC-CLI-008-2
Bond No. 58 96 12
$ 95,000.00 One-Well Plugging Bond
to the State of New Mexico for Class I Injection Well WDW#2
1980' FNL and 660' FWL - Sec 12-Ts18s-R27e N.M.P.M.
Eddy, County, New Mexico
J.S. Ward & Son, Inc., Principal

Gulf Insurance Company, Surety
Bond 58 96 12

The New Mexico Oil Conservation Division hereby approves the above-captioned One-Well Plugging Bond.

Sincerely,

RAND CARROLL,
Legal Counsel

RC/wp

cc: OCD Artesia Office
Gulf Insurance Company

J. S. Ward & Son, Inc.

101 South Fourth Street
(505) 746-2796
FAX (505) 746-4244
Artesia, New Mexico
88210-2195

Insurance
Bonds

April 22, 1999

State of New Mexico
Energy, Minerals & Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505-5472

Attention: Mr. Roger Anderson

Re: Navajo Refining Company
Bond No. 58 96 12
$95,000 One-Well Plugging Bond
to the State of New Mexico for
Class I Injection Well
Chukka Federal #2

Dear Mr. Anderson:

Enclosed please find the captioned bond through Gulf Insurance Company which we trust you find in order and acceptable for filing.

Very truly yours,

J. S. WARD & SON, INC.

By S. Gary Simpson

SGS:emb

Enclosure

cc: Navajo Refining Company
Post Office Box 159
Artesia, New Mexico 88211-0159
Attention: Mr. Joe Akins - Copy of Bond & Invoice

Navajo Refining Company
PRINCIPAL

Post Office Box 159
Artesia, New Mexico 88211-0159
Address

By: [signature]
Signature

President
Title

(Note: Principal, if corporation, affix corporate seal here.)

Gulf Insurance Company
SURETY

101 South Fourth Street
Artesia, New Mexico 88210-2195
Address

[signature]
Attorney-In-Fact

(Note: Corporate surety affix corporate seal here.)

ACKNOWLEDGEMENT FORM FOR NATURAL PERSONS

STATE OF _____)
COUNTY OF _____) ss.

On this _____ day of _____, 19___, before me personally appeared _____, to me known to be the person (persons) described in and who executed the foregoing instrument and acknowledged that he (they) executed the same as his (their) free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

_____
Notary Public

_____
My Commission Expires

ACKNOWLEDGEMENT FORM FOR CORPORATION

STATE OF New Mexico)
COUNTY OF Eddy) ss.

On this 22nd day of April, 19 99, before me personally appeared Jack P. Reid, to me personally known who, being by me duly sworn, did say that he is President of Navajo Refining Company and that the foregoing instrument was signed and sealed on behalf of said corporation by authority of its board of directors, and acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

Rita Beadle
Notary Public

1-16-2001
My Commission Expires

OFFICIAL SEAL
Rita Beadle
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 1-16-2001

ACKNOWLEDGEMENT FORM FOR CORPORATE SURETY

STATE OF New Mexico)
COUNTY OF Eddy) ss.

On this 22nd day of April, 19 99, before me appeared S. Gary Sims, to me personally known, who, being by me duly sworn, did say that he is Attorney-in-Fact of Gulf Insurance Company and that the foregoing instrument was signed and sealed on behalf of said corporation by authority of its board of directors, and acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

Edwina M. Bramlett
Notary Public

7-10-01
My Commission Expires

OFFICIAL SEAL
EDWINA M. BRAMLETT
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commision Expires 7-10-01

(Note: Corporate surety attach power of attorney.)

APPROVED BY:

OIL CONSERVATION DIVISION OF NEW MEXICO

By: [signature]

Date: 4/30/99

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That GULF INSURANCE COMPANY, a corporation of the State of Missouri, hereinafter called "Company," does hereby appoint

CHARLENE M. WARD or S. GARY SIMS or JOHN C. KNIGHT

ARTESIA, NEW MEXICO

its true and lawful Attorney-in-fact to make, execute, seal and deliver on its behalf, as surety, any and all bonds and undertakings of suretyship. , not to exceed $250,000.00 or any bond where the penalty is not stated in the bond form. No authority is granted where the attorney in fact is a party at interest in the bond.

The execution of such bonds or undertakings in pursuance of these presents shall be as binding upon the Company as if they had been executed and acknowledged by the regularly elected officers of the Company.

This Power of Attorney is issued pursuant to and by authority of the following resolution of the Board of Directors of the Company, adopted effective July 1, 1983, and now in full force and effect:

"Resolved that the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary may appoint Attorneys-in-fact in any state, territory or federal district to represent this Company and to act on its behalf within the scope of the authority granted to them, in writing, which authority may include the power to make, execute, seal and deliver on behalf of this Company, as surety, and as its act and deed, any and all bonds and undertakings of suretyship and other documents that the ordinary course of surety business may require, including authority to appoint agents for the service of process in any jurisdiction, state or federal, and authority to attest to the signature of the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary and to verify any affidavit or other statement relating to the foregoing, and to certify to a copy of any of the bylaws of the Company and to any resolutions adopted by its Board of Directors; and any such Attorney-in-fact may be removed and the authority granted him revoked by the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary, or by the Board of Directors."

This Power of Attorney and Certificate are signed and sealed by facsimile under and by authority of the following resolution of the Board of Directors of the Company, adopted effective July 1, 1983, and now in full force and effect:

"Resolved that the signature of the President, or of any Senior Vice President, or of any Vice President, or of the Secretary, or of any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Attorneys-in-fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, including any such power of attorney and certificate revoking the authority of the foregoing Attorneys-in-fact, as well as for the appointment of agents for the service of process in any jurisdiction, state or federal, including any such power of attorney and certificate revoking the authority of such agents; and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power of attorney or certificate so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company at the time any such power of attorney and certificate are executed and in the future with respect to any bond or undertaking to which they are attached."

In Witness Whereof, the Company has caused this Power of Attorney to be signed and its corporate seal to be affixed by its authorized officer this April 12 , 1991.

(SEAL) GULF INSURANCE COMPANY CORPORATE SEAL MISSOURI

By O R Garza
Sr. Vice President

STATE OF TEXAS
COUNTY OF DALLAS

Sworn to and subscribed before me this 12 day of April , 1991 , before me, a Notary Public of the State and County aforesaid, residing therein, duly commissioned and sworn, personally came the above named officer of GULF INSURANCE COMPANY, who being by me first duly sworn according to law, did depose and say that he is that officer of the company described in and which executed the foregoing instrument; that he knows the seal of said company; that the seal affixed to such instrument is the corporate seal of said company; and that the corporate seal and his signature as such officer were affixed and subscribed to the said instrument by the authority and direction of said company.

(SEAL) CLIFFORD R. BEARD NOTARY PUBLIC STATE OF TEXAS EXPIRES 6-30-92

My commission expires the 30th day of June , 1992

Clifford R. Beard
Notary Public

CERTIFICATE

I, the undersigned, do hereby certify that the original Power of Attorney of which the foregoing is a true and correct copy is in full force and effect, and the foregoing resolutions are true and correct transcripts from the records of GULF INSURANCE COMPANY and that the above named officer was on the date of execution of the foregoing Power of Attorney authorized to execute this Power of Attorney.

In Witness Whereof, I have hereunto subscribed my name and affixed the corporate seal of Gulf Insurance Company this 22nd day of April , 1999.

(SEAL) GULF INSURANCE COMPANY CORPORATE SEAL MISSOURI

Vice President

Form O & G B-1
Ad 1 6-17-77
Re 11-01-89

STATE OF NEW MEXICO

ONE-WELL PLUGGING BOND

FOR CHAVES, EDDY, LEA, McKINLEY, RIO ARRIBA, ROOSEVELT, SANDOVAL, AND SAN JUAN COUNTIES ONLY

BOND NO. 58 96 12
AMOUNT OF BOND $95,000.00
COUNTY Eddy

NOTE: For wells less than 5,000 feet deep, the minimum bond is $5,000.00*
For wells 5,000 to 10,000 feet deep, the minimum bond is $7,500.00*
For wells more than 10,000 feet deep, the minimum bond is $10,000.00

*Under certain conditions, a well being drilled under a $5,000.00 or $7,500 bond may be permitted to be drilled as much as 500 feet deeper than the normal maximum depth, i.e., a well being drilled under a $5,000.00 bond may be permitted to go to 5,500 feet, and a well being drilled under a $7,500.00 bond may be permitted to go to 10,500 feet. (See Rule 101)

File with Oil Conservation Division, P. O. Box 2088, Santa Fe 87501

KNOW ALL MEN BY THESE PRESENTS:

That Navajo Refining Company, (a corporation organized in the State of New Mexico, with its principal office in the city of Artesia, State of New Mexico, and authorized to do business in the State of New Mexico), as PRINCIPAL, and Gulf Insurance Company, a corporation organized and existing under the laws of the State of Missouri, and authorized to do business in the State of New Mexico, as SURETY, are held firmly bound unto the State of New Mexico, for the use and benefit of the Oil Conservation Division of New Mexico pursuant to Section 70-2-12, New Mexico Statutes Annotated, 1978 Compilation, as amended, in the sum of Ninety-Five Thousand and no/100ths Dollars lawful money of the United States, for the payment of which, well and truly to be made, said PRINCIPAL and SURETY hereby bind themselves, their successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that:

WHEREAS, The above principal has heretofore or may hereafter enter into oil and gas lease, or carbon dioxide (CO_2) gas leases, or helium gas leases, or brine mineral leases with the State of New Mexico; and

WHEREAS, The above principal has heretofore or may hereafter enter into oil and gas leases, or carbon dioxide (CO_2) gas leases, or helium gas leases, or brine mineral leases on lands patented by the United States of America to private individuals, and on lands otherwise owned by private individuals; and

WHEREAS, The above principal, individually, or in association with one or more other parties, has commenced or may commence the drilling of one well not to exceed a depth of 9200 feet, to prospect for and produce oil or gas, or carbon dioxide (CO_2) gas or helium gas, or does own or may acquire, own or operate such well, or such well started by others on land embraced in said State oil and gas leases, or carbon dioxide (CO_2) leases, or helium gas leases, or brine minerals, and on land patented by the United States of America to private individuals, and on land otherwise owned by private individuals, the identification and location of said well being being 1980' FNL and 660' FWL, Section 12, Township 18 (South)
(Here state exact legal footage description)
Range 27 (East), N.M.P.M., Eddy County, New Mexico.

NOW, THEREFORE, If the above bounden principal and surety or either of them or their successors or assigns, or any of them, shall plug said well when dry or when abandoned in accordance with the rules, regulations, and orders of the Oil Conservation Division of New Mexico in such way as to confine the oil, gas, brine, and water in the strata in which they are found, and to prevent them from escaping into other strata;

THEN, THEREFORE, This obligation shall be null and void; otherwise and in default of complete compliance with any and all of said obligations, the same shall remain in full force and effect.

Signed and sealed this 22nd day of April, 1999.

ATTACHMENT A

Sunday, May 9, 1999

Pressure testing the 8-5/8 inch Surface Casing from 1922 feet (KB) to 30 feet (KB) using a fresh water fluid. Pressure testing was performed after the perforations between 1446 feet and 1462 feet were squeezed with cement.

Pressure Test No. 1

Time (hrs.)	Cumulative Time (minutes)	Pressure (psig)	Delta Pressure (psi)
1303	0	660	----
1308	5	660	0
1313	10	660	0
1318	15	660	0
1323	20	660	0
1328	25	659	-1
1333	30	659	0

Total =-1 psi per 30 minutes

Pressure Test No. 2

Time (hrs.)	Cumulative Time (minutes)	Pressure (psig)	Delta Pressure (psi)
1333	0	659	----
1338	5	659	0
1343	10	659	0
1348	15	658	-1
1353	20	658	0
1358	25	657	-1
1303	30	657	0

Total =-2 psi per 30 minutes

WF—

TELEPHONE
(505) 748-3311

EASYLINK
62905278

REFINING COMPANY

501 EAST MAIN STREET • P. O. BOX 159
ARTESIA, NEW MEXICO 88211-0159

FAX
(505) 746-6410 ACCTG
(505) 746-6155 EXEC
(505) 748-9077 ENGR
(505) 746-4438 P / L

May 10, 1999

Mr. Tim Gumm
State of New Mexico
Energy, Minerals and Natural
Resources Department
Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

RE: Re-Entry for Navajo Refining Company's Waste Disposal Well No. 2

Dear Mr. Gumm:

Navajo Refining Company (Navajo) has contracted Subsurface Technology, Inc. to re-enter, test and complete Waste Disposal Well No. 2 (WDW-2), formerly the Chukka Federal No. 2 operated by The Eastland Oil Company. The United States Department of the Interior, Bureau of Land Management approved the Application for Permit to Drill or Deepen on April 27, 1999. Subsequent approval from the State of New Mexico Oil Conservation Commission (OCD) was granted on Tuesday, May 4, 1999.

Navajo initiated field operations on Wednesday, May 5, 1999. The existing pumping equipment, rods, and tubing were removed from the wellbore. The perforations from 1446 feet to 1462 feet were squeezed using 100 sacks of Class 'H' cement (approximately 50 sacks of cement were displaced into the perforated interval). The cement was allowed to cure and drilled out to a total depth of 1922 feet (KB)(1911 feet below ground level).

On Sunday, May 9, 1999, the 8-5/8 inch surface casing, set from 1955 feet (KB) to surface, was pressure tested for internal mechanical integrity between 1922 feet (KB) and 30 feet (KB) using a packer set at 30 feet. The 8-5/8 inch surface casing was pressure tested to 660 pounds per square inch and monitored at the surface for one hour (Attachment A). The fluid used for testing was a clean fresh water fluid. A pressure loss of 1 psi (0.15%) was observed during the first 30 minutes of the test. A pressure loss of 2 psi (0.30%) was observed during the last 30 minutes of the test. The results from the pressure test confirmed internal mechanical integrity of the 8-5/8 inch surface casing from 1922 feet (KB) to 30 feet (KB).

The 8-5/8 inch surface casing was originally set in an 11 inch open-hole to a depth of 1955 feet (KB) and cemented to surface using 700 sacks of Class 'H' cement with 2% gel and 100 sacks of Class 'H' neat. A total of 200 sacks of cement was recorded circulated to surface. The calculated volume between an 11 inch hole and 8-5/8 inch casing is (0.2407 cubic feet per foot X 1955 feet) 471 cubic feet. The volume of cement pumped is (1.18 cubic feet per sack X 800 sacks) 944 cubic feet for an excess of 473 cubic feet or 400 sacks circulated to surface. The calculated volume of cement and apparent volume of actual cement pumped indicated excess cement was circulated to surface.

On Sunday, May 9, 1999, Halliburton Logging Services completed a cement bond and microsiesmogram (same as a variable density log) logging survey within the 8-5/8 inch casing from a wireline total depth of 1919 feet (KB) to the surface (Attachment B). The results from the survey indicate a continuous column of cement from 1922 feet to surface with good bonding characteristics. The cement behind the 8-5/8 inch casing will provide an effective hydraulic seal to prevent the movement of groundwater fluids into the underground source of drinking water with a base at 473 feet.

Please review and approve the pressure testing and cement bond log results at your earliest convenience. Navajo will proceed with the mobilization of the drilling rig Wednesday, May 12, 1999 and begin re-entry of the WDW-2 wellbore according to the approved drilling program. Navajo will periodically contact the OCD, Artesia office with a status update of the re-entry operations. The Bureau of Land Management will be notified in sufficient time for a representative to witness the cementing of the 5-1/2 inch protection casing.

Should you have any questions or concerns, please call me at (505) 748-3311.

Sincerely yours,

Darrell Moore

Darrell Moore
Environmental Manager for Water and Waste

c: Mr. David Glass
Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201

Mr. Brian Rogers
Subsurface Technology, Inc.
7020 Portwest, Suite 100
Houston, Texas 77024

File: Injection Wells

ENVIROCORP®

March 30, 1999

Mr. Barry Hunt
Bureau of Land Management
Carlsbad Resource Area
620 East Greene Street
Carlsbad, New Mexico 88220-6292

RE: Navajo Refining Company Proposed WDW-2, Eddy County, New Mexico
Request for On-Site Inspection of Wellsite
Subsurface Project No. 60A4937

Dear Mr. Hunt:

Navajo Refining Company (Navajo) is purchasing an existing well in Eddy County, New Mexico for planned use as a Class I nonhazardous effluent disposal well, and plans to reenter and test the well in the next few months. The well is on federal land. Subsurface Technology, Inc. (Subsurface), formerly Envirocorp Services & Technology, Inc., on behalf of Navajo, requests your participation in an on-site inspection of the wellsite as soon as possible.

Pertinent information about the existing well is provided below:

Lease Number:	NM 6852
Current Operator: Lease:	The Eastland Oil Company (September 1990 to present) Chukka Federal No. 2
Former Operator:	Fred Pool Drilling Company (August 1985 to September 1990)
Former Operator: Former Lease:	Amoco Production Company (July 1973 to August 1985) Diamond Federal Gas Com. No. 1
Location:	1980' FNL, 660' FWL (SW/4 NW/4, Unit Letter E) 12-T18S-R27E

Topographic Map (Attachment A)

Original Total Depth: 10,372 feet
Plugged-Back Total Depth: 1912 feet
Well Schematic (Attachment B)

Status: The well is producing from the Penrose from perforations between 1446 feet and 1462 feet. Navajo is currently

ENVIROCORP SERVICES & TECHNOLOGY, INC.

7020 PORTWEST DRIVE, #100 HOUSTON, TEXAS 77024 713/880-4640 FAX 713/880-3248

negotiating to purchase the well from Eastland Oil Company. The purchase should be completed by April 1, 1999.

Navajo proposes to reenter the well, squeeze the perforations from 1446 feet to 1462 feet, drill out the plugs and clean out the well to approximately 9200 feet, set 5-1/2 inch casing at 9200 feet and cement it to the surface, and conduct one or more injectivity tests. The proposed injection intervals are porous zones in the lower portion of the Wolfcamp Formation (7270 feet to 7645 feet), the Cisco Formation (7645 feet to 8390 feet), and the Canyon Formation (8390 feet to 8894 feet). Navajo's proposed reentry, testing, and recompletion procedure is included as Attachment C. A schematic of the well after recompletion is included as Attachment D.

Subsurface is currently preparing a discharge plan application for the Class I well for Navajo to submit to the New Mexico Oil Conservation Division and the BLM Roswell office near the end of April 1999. Subsurface is also preparing BLM Form 3160-3 (Application for Permit to Drill) for Navajo to submit to the BLM Roswell office.

Please contact me at (713) 880-4640 to schedule an on-site inspection of the wellsite. Do not hesitate to call me if you need additional information or if you have questions.

Sincerely,

Nancy L. Niemann

Nancy L. Niemann
Senior Geologist

NLN/paf
Attachments

c: Joe Lara – BLM, Carlsbad
David Glass – BLM, Roswell
Wayne Price – OCD, Santa Fe
Tim Gum – OCD, Artesia
Phil Youngblood – Navajo
Darrell Moore – Navajo
George Walbert – Holly Petroleum, Inc.

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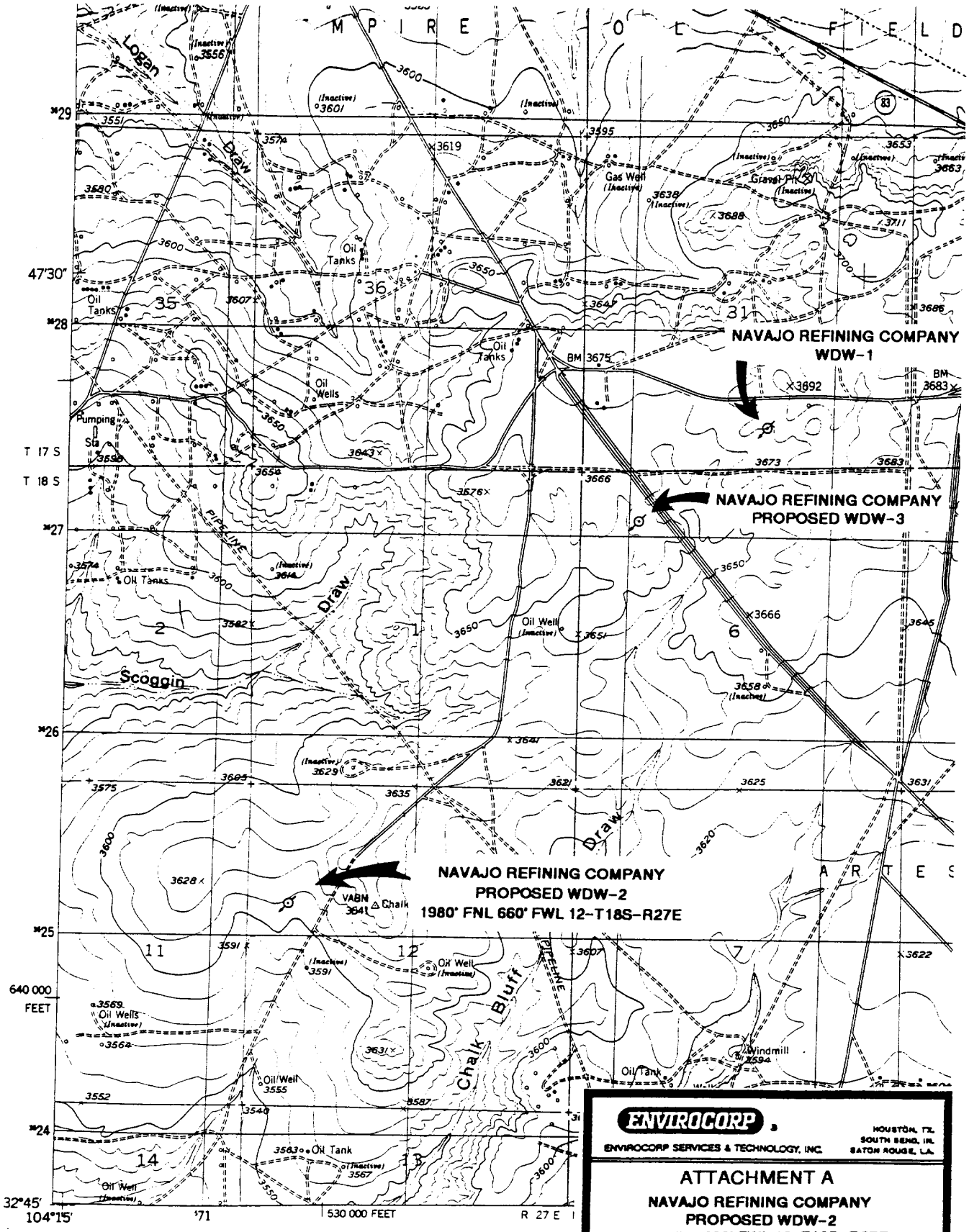

RED LAKE QUADRANGLE

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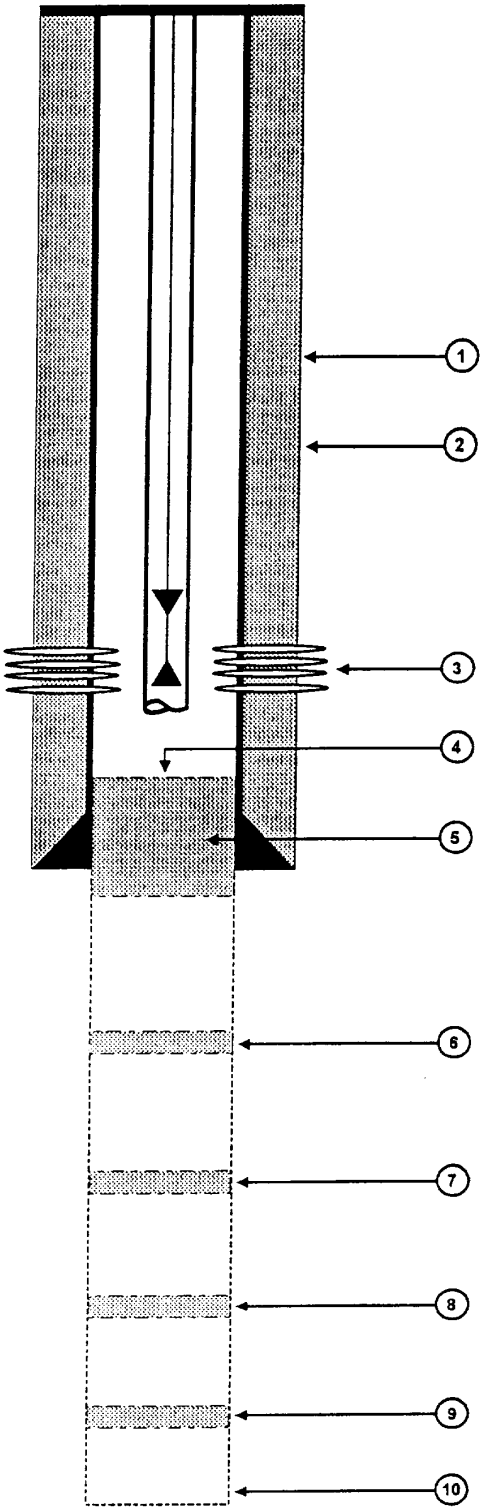
HOUSTON, TX.
SOUTH BEND, IN.
BATON ROUGE, LA.

ATTACHMENT A

NAVAJO REFINING COMPANY
PROPOSED WDW-2
1980' FNL 660' FWL 12-T18S-R27E
EDDY COUNTY, NM

DATE:	CHECKED BY:	JOB NO:
DRAWN BY:	APPROVED BY:	DWG. NO:

ATTACHMENT B



Total Depth: 10,372'

BELOW GROUND DETAIL

All depths are referenced to the kelly bushing elevation of 13 feet. The surface elevation is 3610 feet.

1. Base of the USDW at 473'.

2. Casing: 8-5/8", 32 lb/ft, set at 1955' in an 11" hole. Cemented to surface with 700 sacks of cement.

3. Perforations: 1446' - 1462'.

4. PBTD: 1912'.

5. Cement Plug: 40 sacks from 1912' to 2045'.

6. Cement Plug: 50 sacks from 3620' to 3720'.

7. Cement Plug: 40 sacks from 5456' to 5556'.

8. Cement Plug: 50 sacks from 7435' to 7535'.

9. Cement Plug: 45 sacks from 9675' to 9775'.

10. Hole Size: 7-7/8".

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ATTACHMENT III-2
NAVAJO REFINING COMPANY
CURRENT WELL CONFIGURATION
CHUKKA FEDERAL No. 2

Date: 03/10/99	Checked By: NLN	Job No.: 60A4937
Drawn By: LKM	Approved By: NLN	File: WDW2A.DS4

ATTACHMENT C

DRILLING AND RECOMPLETION PROCEDURE FOR NAVAJO REFINING COMPANY'S PROPOSED WDW-2

1. Obtain all permits and approvals for the reentry, testing and completion of a currently existing well.

2. Move in and rig up a workover unit. Remove the pumping equipment and pull the tubing out of the well.

3. Go in the hole with a squeeze packer and squeeze the perforations from 1446 feet to 1462 feet with 100 sacks of Class "H" cement. Allow the cement to cure.

4. Drill out the cement, circulate the well clean and pressure test the squeezed perforations at 500 psig for 30 minutes. Pull the squeeze tools out of the hole.

5. Conduct a CBL/VDL survey from 1912 feet to the surface. Submit the results of the pressure test and CBL/VDL survey to the OCD and the BLM for their review and approval prior to mobilizing the drilling rig.

6. After receiving approval from the OCD and the BLM to continue the reentry, prepare the location for the selected drilling rig. Construct the lined reserve pits, dig out the cellar, and install a mousehole and rathole.

7. Move in and rig up the rotary drilling rig and install the blowout preventers.

8. Drill out the following cement plugs and conduct deviation surveys every 1000 feet or on trips:

   a. 1912 feet to 2045 feet, 40 sacks
   b. 3620 feet to 3720 feet, 50 sacks
   c. 5456 feet to 5556 feet, 40 sacks
   d. 7435 feet to 7535 feet, 50 sacks

9. Clean the well out to a depth of 9200 feet and circulate and condition the hole for logging. Make a wiper trip to the base of the 8-5/8 inch surface casing while strapping the drillpipe.

10. Conduct a formation microimager (FMI) survey with gamma ray from the well's total depth to 4000 feet. Continue the four-arm caliper survey to the 8-5/8 inch

casing shoe. Process the FMI for fracture identification over the lower 200 feet of the confining zone and zones of interest in the injection zone, if warranted.

11. Spot a gelled pill at 9200 feet and lay down the drillpipe.

12. Run the 5-1/2 inch casing with a packoff shoe and float collar to 9200 feet. Install a "DV" tool at 5500 feet. Run centralizers at approximately 120-foot intervals.

13. Cement the 5-1/2 inch casing in place. Use a minimum of 20% excess cement as calculated from the caliper log. Circulate cement to the surface and allow to cure.

14. Clean out the mud pits and release the drilling rig 12 hours after cementing the 5-1/2 inch casing in place.

15. Stabilize the 5-1/2 inch casing at the surface using ready-mix cement.

16. Move in and rig up the completion rig pump, tank, power swivel, and work string. Install the blowout preventer.

17. Run in the well with a 4-3/4 inch bit to the "DV" tool and test the casing to 1500 psig for 30 minutes.

18. Drill out the "DV" tool and clean out the wellbore to the float collar. Test the casing to 1500 psig for 30 minutes. Circulate the wellbore with clean brine, preceded by 15% HCL to clean the casing. Trip the work string out of the well.

19. Conduct the casing inspection, CBL/VDL, and differential temperature surveys.

20. Perforate the selected injection interval as determined from the open hole logs. (Zone 1).

21. Run in the well with a packer and tailpipe. Set the packer above the top perforation and swab test the perforated interval. Recover at minimum two tubing volumes of the reservoir fluid for analysis (Note: Set up H_2S monitoring equipment prior to swabbing operations).

22. Acidize the zone using diverters. Pull the packer out of the well.

23. Perforate the next selected injection interval as determined from the open hole logs (Zone 2).

ATTACHMENT C (Continued)

24. Run a retrievable bridge plug and packer into the well and isolate Zone 2.

25. Acidize Zone 2 using diverters. Pull the retrievable bridge plug and packer out of the well, laying down the work string.

26. Conduct an injection test down the 5-1/2 inch casing at 420 gpm for 12 hours followed by a pressure falloff test.

27. Conduct a differential temperature survey and radioactive tracer survey to determine the injection profile.

28. Run the injection tubing and packer. Fill the annulus with corrosion inhibited brine.

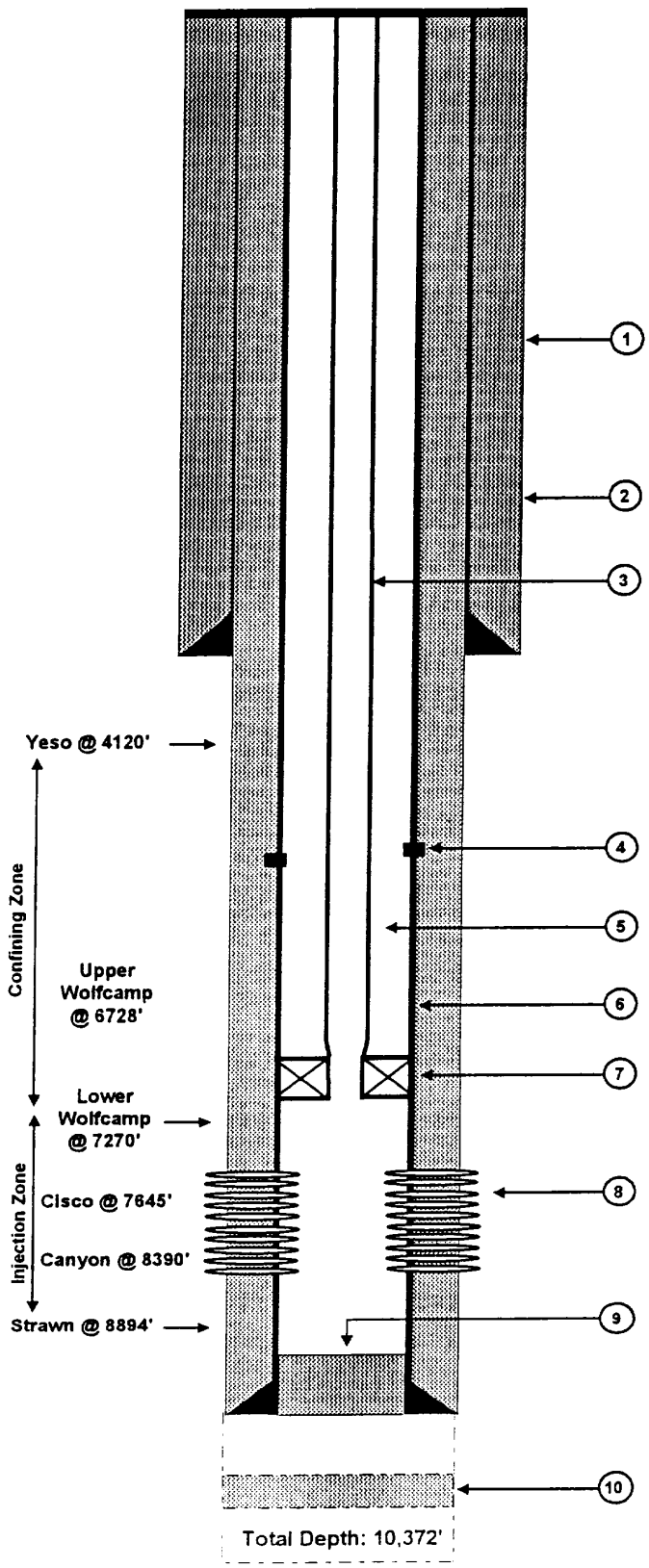
29. Wait for the well system to come to thermal stabilization (approximately 24 hours).

30. Conduct an annulus pressure test witnessed by the OCD.

31. Rig down and move out all equipment and close the reserve pit.

32. Install the annulus monitoring system and return the well to the client.

ATTACHMENT D



BELOW GROUND DETAIL

All depths are referenced to the kelly bushing elevation of 13 feet. Surface elevation is 3610 feet.

1. Base of the USDW at 473'.

2. Casing: 8-5/8", 32 lb/ft, set at 1955' in an 11" hole. Cemented to surface with 700 sacks of cement.

3. Injection Tubing: 3-1/2".

4. DV Tool: at 5500'.

5. Annulus Fluid: Corrosion inhibited brine water.

6. Protection Casing: 5-1/2" set in a 7-7/8" hole. Casing cemented to surface. Calipered hole volume plus 20% excess.

7. Packer: Fullbore retrievable packer set 100' above the top perforated injection interval.

8. Perforations: Perforated in two intervals between 7270' and 8894'.

9. PBTD: 9200'

10. Cement Plug: 45 sacks from 9675' to 9775'.

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ATTACHMENT III-4
NAVAJO REFINING COMPANY
PROPOSED WDW-2
ARTESIA, NEW MEXICO

Date: 03/11/99	Checked By: NLN	Job No.: 60A4937
Drawn By: LKM	Approved By: NLN	File: WDW2B.DS4

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Navajo Refining Company **Well No.** 2 - WDW
Location: 1980' FNL & 660' FWL **sec.** 12 , **T.** 18 S. , **R.** 27 E.
Lease: NM-6852

I. DRILLING OPERATIONS REQUIREMENTS: **[Deepening]**

1. The Bureau of Land Management (BLM) is to be notified at (505) 887-6544 in sufficient time for a representative to witness:

A. Cementing casing: **5-1/2** inch

2. Unless the injection casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

II. CASING:

1. Minimum required fill of cement behind the **5-1/2** inch injection casing is **sufficient to circulate to the surface.**

III. PRESSURE CONTROL:

1. Before drilling into the **100 foot 8-5/8 inch surface casing shoe cement plug at approximately 1912 feet ,** the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **3000** psi.

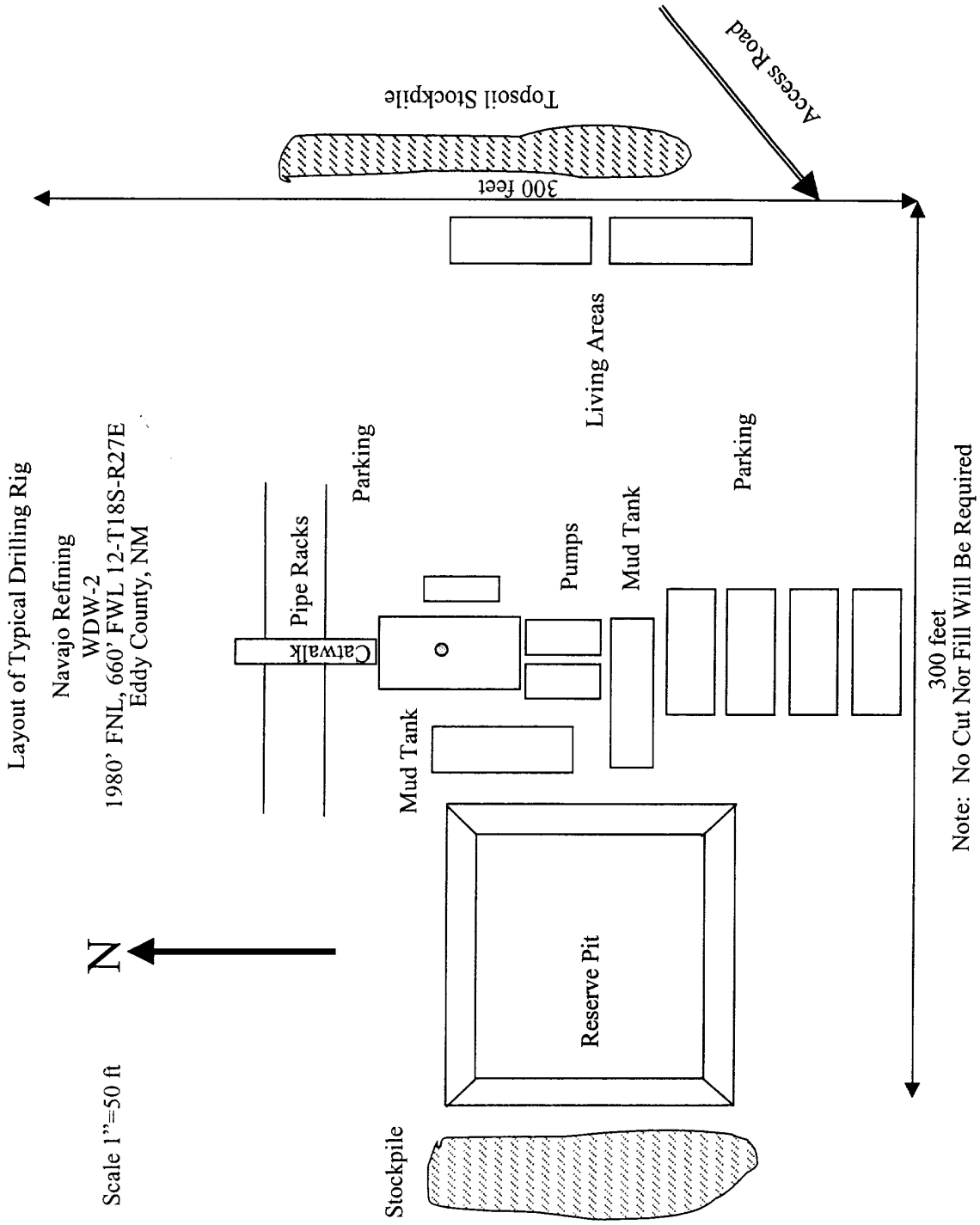
3. After drilling into the **100 foot 8-5/8 inch surface casing shoe cement plug at approximately 1912 feet** and before drilling into the **100 foot Abo cement plug at approximately 5450 feet ,** the BOPE shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

A. The results of the test will be reported to the BLM Carlsbad Resource Area office at 620 East Greene Street, Carlsbad, New Mexico 88220-6292.

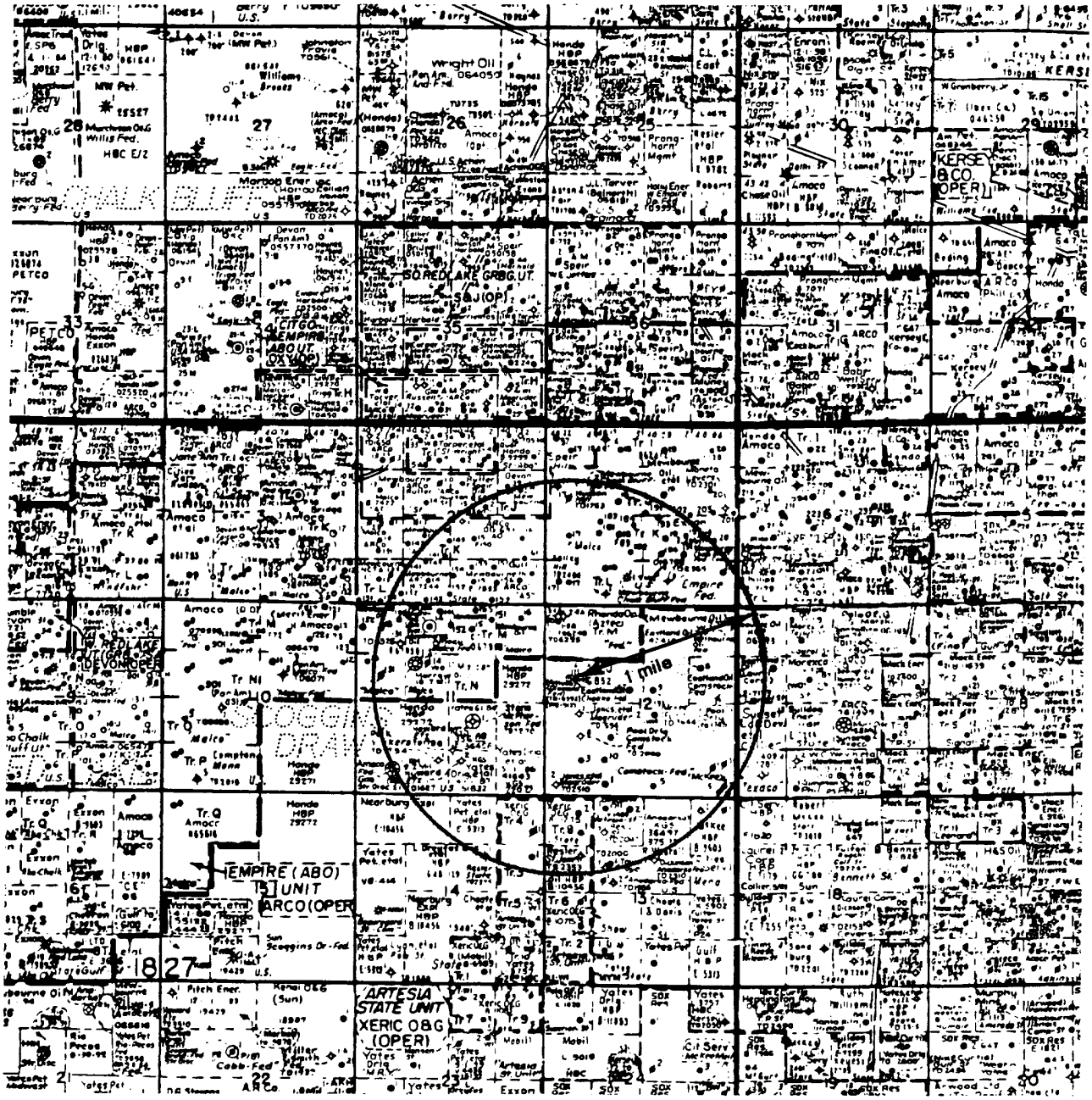
B. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

C. Testing must be done in a safe workman like manner. Hard line connections shall be required.

EXHIBIT C



Subsurface Technology, Inc.



Map courtesy of Midland Map Company

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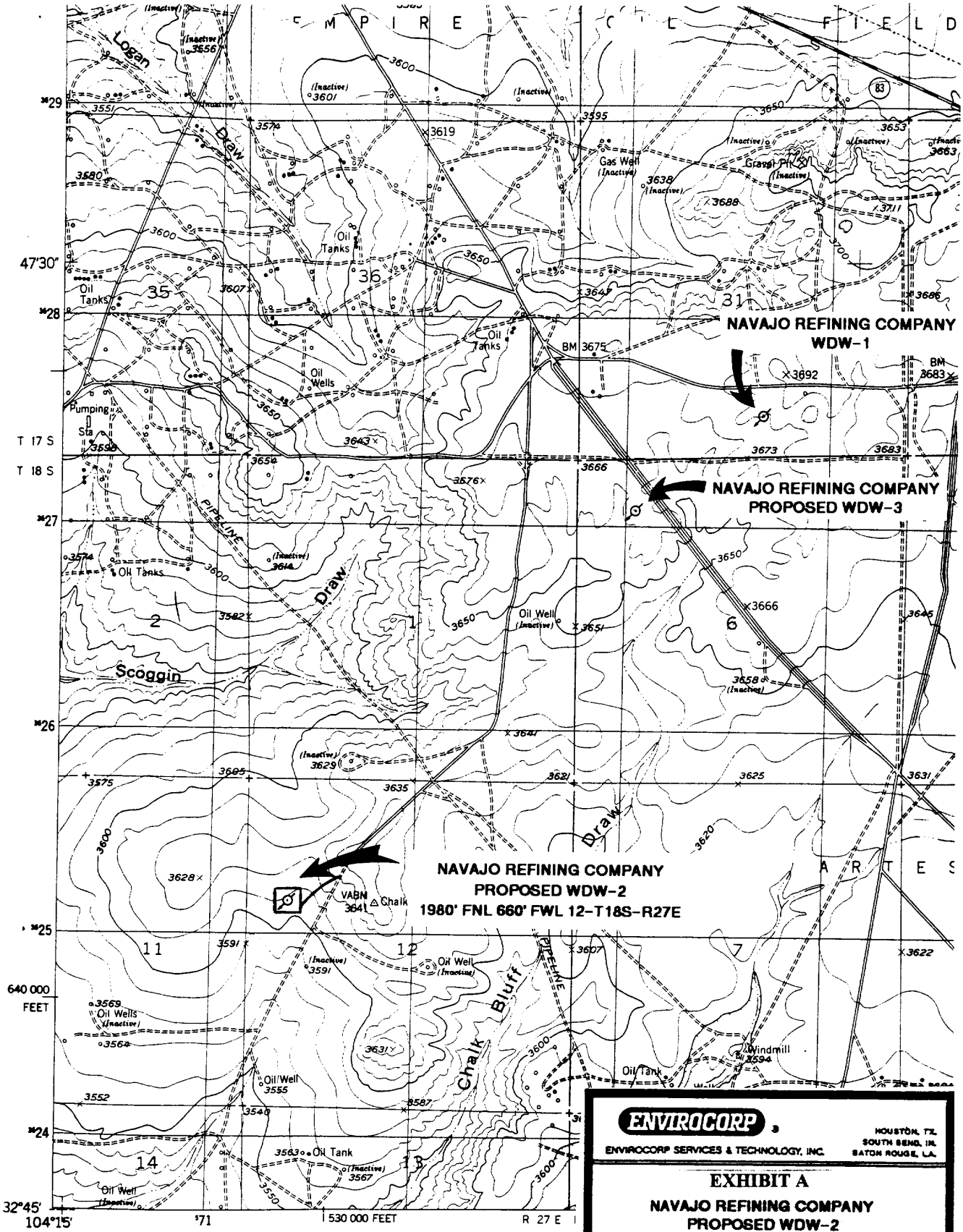
HOUSTON, TX.
SOUTH BEND, IN.
BATON ROUGE, LA.

EXHIBIT B
WELLS WITHIN 1 MILE OF
NAVAJO REFINING COMPANY'S
PROPOSED WDW-2
1980' FNL, 660' FWL 12-T18S-R27E

DATE: 4/7/99	CHECKED BY:	JOB NO:
DRAWN BY: NLN	APPROVED BY:	DWG. NO:



RED LAKE QUADRANGLE

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HOUSTON, TX.
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BATON ROUGE, LA.

EXHIBIT A

NAVAJO REFINING COMPANY
PROPOSED WDW-2
1980' FNL 660' FWL 12-T18S-R27E
EDDY COUNTY, NM

DATE:	CHECKED BY:	JOB NO:
DRAWN BY:	APPROVED BY:	DWG. NO:

SURFACE USE PLAN

NAVAJO REFINING COMPANY
PROPOSED WDW-2
1980' FSL, 660' FWL of 12-T18S-R27E
EDDY COUNTY, NEW MEXICO

1. Existing Roads: Existing roads that lead to the proposed drillsite are shown on Exhibit A.

2. Access Roads To Be Constructed: No new access road is proposed.

3. Location of Existing Wells: Existing wells within one mile of proposed WDW-2 are shown on Exhibit B.

4. Location of Proposed Facilities If Well Is Completed: The well will be shut in after completion and testing.

5. Location and Type of Water Supply: Water for reentry, testing, and completion operations will be purchased from a commercial water hauler.

6. Source of Construction Materials: Materials required for construction of the site will be taken from a state-owned pit.

7. Methods of Handling Waste Disposal:

   A. Drill cuttings will be disposed of in the drilling pits.

   B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

   C. Water produced during tests will be disposed of in the drilling pits.

   D. Trash, waste paper, garbage, and junk will be buried in a trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit C.

E. All trash and debris will be buried or removed form the wellsite after finishing drilling and/or completion operations.

8. Ancillary Facilities: None anticipated.

9. Wellsite Layout:

A. The wellsite will be surveyed, and a 400' x 400' area will be staked and flagged.

B. The dimensions and relative location of the drill pad, mud pit, and trash pit, with respect to the wellbore, are shown on Exhibit C.

C. Existing topsoil to a depth of 6 inches will be lifted and stockpiled at the northeastern (uphill) end of the well pad. The stockpiled topsoil will be located uphill to avoid mixing with subsurface materials.

D. The well pad will be surfaced with material found in place.

E. The pits for mud and cuttings will be lined with 6-mil plastic.

10. Plans for Restoration of Surface:

A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk.

B. Any unguarded pits containing fluids will be fenced until they are filled.

C. After abandonment, all equipment, trash, and junk will be removed and the location cleaned.

D. The stockpiled topsoil will be spread over the surface of the location.

11. Surface Ownership: U.S. Department of Interior, Bureau of Land Management.

12. Archaeological Survey: An archaeological survey of the drill pad was submitted to the BLM on July 31, 1985, on behalf of Fred Pool Drilling Company. An archeological survey was conducted by Navajo Refining Company and will be submitted by Navajo under separate cover.

13. Operator's Representatives: Representatives responsible for assuring compliance with the approved Surface Use Plan:

Mr. Darrell Moore	Mr. Jim Bundy
Navajo Refining Company	Subsurface Technology, Inc.
Post Office Box 159	7020 Portwest Drive, Suite 100
Artesia, New Mexico 88211	Houston, Texas 77024
505/748-3311	713/880-4640

Exhibits

A. Topographic Map
B. Oil and Gas Map
C. Sketch of Well Pad

14. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Navajo Refining Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

4/15/99
Date

Darrell Moore
Signature

Darrell Moore
Name

Env. Mgr. for Water & Waste
Title

Navajo Refining Company
Company

BOP Minimum Requirements

a. 11-inch, 3000-psi working pressure double-hydraulic BOP.
b. 11-inch, 3000-psi working pressure annular BOP.
c. 3-inch, 3000-psi working pressure manual choke manifold.

A schematic of the BOP stack is included as Exhibit A.

8. Drill out the following cement plugs and conduct deviation surveys every 1000 feet or on trips:

a. 1912 feet to 2045 feet, 40 sacks
b. 3620 feet to 3720 feet, 50 sacks
c. 5456 feet to 5556 feet, 40 sacks
d. 7435 feet to 7535 feet, 50 sacks

Estimated Tops of Geologic Formations

San Andres	2005'	Lower Wolfcamp	7270'
Yeso	4210'	Cisco	7645'
Abo	5506'	Canyon	8390'
Wolfcamp	6728'	Strawn	8894'

No fresh water or hydrocarbons are expected to be encountered.

Expected Bottom-Hole Pressure and Hazards

The expected bottom-hole pressure is 3500 psia at the total depth of 9200 feet. The bottom-hole pressure was determined from the pressure measured in Navajo's WDW-1, or 2928 psia, at 7924 feet. Navajo's WDW-1 is completed in the same interval proposed for WDW-2 and is located 11,000 feet northeast of WDW-2 in 31-T17S-R28E. The average specific gravity of the fluid between 7924 feet and 9200 feet is expected to be 1.034, which is the specific gravity of the fluid swabbed from the interval between 8220 feet and 8476 feet in WDW-1. The expected bottom-hole pressure at 9200 feet in proposed WDW-2 is calculated below:

$$\text{BHP (9200 feet)} = 2928 \text{ psia} + (9200 \text{ feet} - 7924 \text{ feet}) \times 0.433 \text{ psi/ft} \times 1.034$$
$$= 3500 \text{ psia}$$

No abnormal pressures or temperatures or other hazards are expected while drilling or testing the well. Hydrogen sulfide monitoring equipment will be set up prior to swabbing operations.

9. Clean the well out to a depth of 9200 feet and circulate and condition the hole for logging. Make a wiper trip to the base of the 8-5/8 inch surface casing while strapping the drillpipe.

10. Conduct a formation microimager (FMI) survey with gamma ray from the well's total depth to 4000 feet. Continue the four-arm caliper survey to the 8-5/8 inch casing shoe. Process the FMI for fracture identification over the lower 200 feet of the confining zone and zones of interest in the injection zone, if warranted.

11. Spot a gelled pill at 9200 feet and lay down the drillpipe.

12. Run the 5-1/2 inch, 17-lb/ft, J-55, LT&C casing with a packoff shoe and float collar to 9200 feet. Install a "DV" tool at approximately 5800 feet. Run centralizers at approximately 120-foot intervals.

13. Cement the 5-1/2 inch casing in place. Use a minimum of 20% excess cement as calculated from the caliper log. Circulate cement to the surface and allow to cure.

    Cement Program

    a. Stage 1 Cement (total depth to 5800 feet): Lightweight Class H with fly ash, gel, friction reducer, and salt mixed with fresh water.

    b. Stage 2 Lead Cement (5200 feet to the surface): Lightweight Class C with gel and bridging agents mixed with fresh water.

    c. Stage 2 Tail Cement (5800 feet to 5200 feet): Class C mixed with fresh water.

14. Clean out the mud pits and release the drilling rig 12 hours after cementing the 5-1/2 inch casing in place.

15. Stabilize the 5-1/2 inch casing at the surface using ready-mix cement.

16. Move in and rig up the completion rig pump, tank, power swivel, and work string. Install the blowout preventer.

17. Run in the well with a 4-3/4 inch bit to the "DV" tool and test the casing to 1500 psig for 30 minutes.

18. Drill out the "DV" tool and clean out the wellbore to the float collar. Test the casing to 1500 psig for 30 minutes. Circulate the wellbore with clean brine, preceded by 15% HCL to clean the casing. Trip the work string out of the well.

19. Conduct the casing inspection, CBL/VDL, and differential temperature surveys.

20. Perforate the selected injection interval as determined from the open hole logs. Depending on the height of the perforated interval, the interval may be perforated in two stages, as Zone Nos. 1 and 2.

21. Run in the well with a packer and tailpipe. Set the packer above the top perforation and swab test the perforated interval. Recover at minimum two tubing volumes of the reservoir fluid for analysis (Note: Set up H_2S monitoring equipment prior to swabbing operations).

22. Acidize the perforated zone (Zone 1) using diverters. Pull the packer out of the well.

23. Perforate the next selected injection interval (Zone 2) as determined from the open hole logs.

24. Run a retrievable bridge plug and packer into the well and isolate Zone 2.

25. Acidize Zone 2 using diverters. Pull the retrievable bridge plug and packer out of the well, laying down the work string.

26. Conduct an injection test down the 5-1/2 inch casing at 420 gpm for 12 hours, followed by a pressure falloff test.

27. Conduct a differential temperature survey and radioactive tracer survey to determine the injection profile.

28. Run the injection tubing and packer. Fill the annulus with corrosion inhibited brine.

29. Wait for the well system to come to thermal stabilization (approximately 24 hours).

30. Conduct an annulus pressure test witnessed by the OCD.

31. Rig down and move out all equipment and close the reserve pit.

32. Install the annulus monitoring system and return the well to the client.

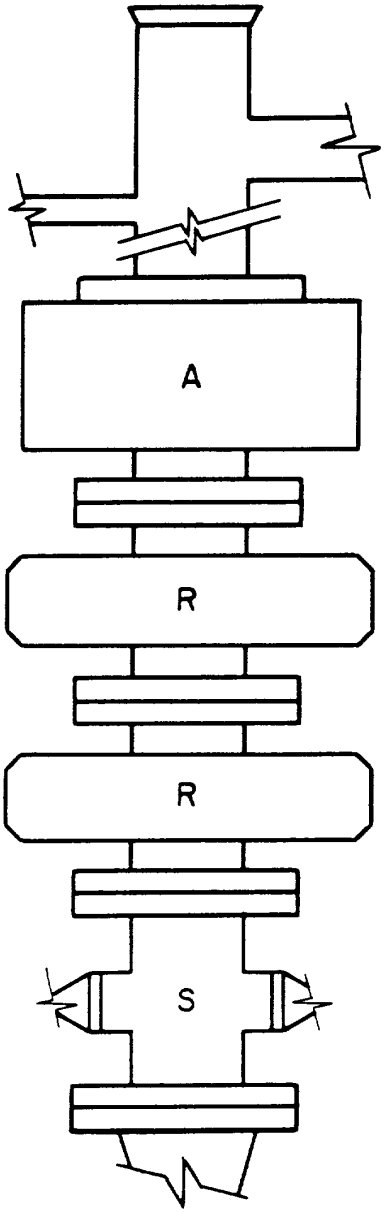
Logging, Testing, And Coring Program

A formation fluid sample will be retrieved from the proposed injection zone in proposed WDW-2. Navajo will conduct injectivity testing in the injection zone of proposed WDW-2.

No coring is planned.

The proposed logging program is described below:

HOLE/CASING	OPEN-HOLE LOGS	CASED-HOLE LOGS
Proposed WDW-2		
11 inch Surface Borehole (8-5/8 inch Casing) 1995 feet		Logs Run in 1973: Gamma Ray Logs Proposed on Reentry: Cement Bond/Variable Density Casing Inspection Log
7-7/8 inch Long-String Borehole (5-1/2 inch Casing) 9200 feet	Logs Run on August 27, 1973: Dual Induction-Laterolog/ Spontaneous Potential Compensated Neutron/ Formation Density Caliper Gamma Ray Logs Proposed on Reentry: Fracture Identification Log 4-Arm Caliper	Logs Proposed on Reentry: Cement Bond/Variable Density Casing Inspection Log Differential Temperature Log Radioactive Tracer Survey



A = ANNULAR-TYPE BLOWOUT PREVENTER
11-inch throughbore, 3000-psi working pressure

R = RAM-TYPE BLOWOUT PREVENTER
11-inch throughbore, 3000-psi working pressure

S = DRILLING SPOOL WITH SIDE OUTLET CONNECTIONS FOR CHOKE AND KILL LINES

MANUAL CHOKE MANIFOLD
3-inch throughbore, 3000-psi working pressure

Source: API RP 53: Recommended Practices for Blowout Prevention Equipment Systems

ENVIROCORP
ENVIROCORP SERVICES & TECHNOLOGY, INC.
HOUSTON, TX.
SOUTH BEND, IN.
BATON ROUGE, LA.

EXHIBIT A

BLOWOUT PREVENTER STACK AND MINIMUM REQUIREMENTS

DATE: 4/7/98	CHECKED BY: JDB	JOB NO:
DRAWN BY: MLN	APPROVED BY:	DWG. NO:

Form 3160-3
(July 1992)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division
811 S. 1st Street
Artesia, NM 88210-2834

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NM 6852

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: 23592

8. FARM OR LEASE NAME, WELL NO.: WDW-~~3~~ #2

9. API WELL NO.: 30-015-20894

10. FIELD AND POOL, OR WILDCAT: L. Wolfcamp-Cisco-Canyon Injection Zone

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 12-T18S-R27E

1a. TYPE OF WORK: DRILL ☐ DEEPEN ☐ Reenter

b. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ OTHER Class I Waste Disposal Well SINGLE ZONE ☐ MULTIPLE ZONE ☒

2. NAME OF OPERATOR: Navajo Refining Company 15694

3. ADDRESS AND TELEPHONE NO.: Post Office Box 159, Artesia, New Mexico 88211

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FNL and 660' FWL Unit Letter
At proposed prod. zone:

APR 1999 RECEIVED OCD - ARTESIA

12. COUNTY OR PARISH: Eddy

13. STATE: NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 11 air miles east-southeast of Artesia

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any):

16. NO. OF ACRES IN LEASE:

17. NO. OF ACRES ASSIGNED TO THIS WELL:

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.:

19. PROPOSED DEPTH: 9200'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3607' GR, 3623' KB

22. APPROX. DATE WORK WILL START*: May 1, 1999

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8-5/8"	32 lb/ft	1995'	800 sx circulated
7-7/8"	5-1/2"	17 lb/ft	9200'	Caliper volume + 20% excess

Proposed reentry of the Eastland Oil Company (originally Fred Pool Drilling, Inc.) Chukka Federal No. 2 (PBTD 1912 feet, September 10, 1985) formerly Amoco Production Company Diamond Federal Gas Com. No. 1 (OTD 10,372 feet, P&A August 31, 1973). The well currently produces oil and gas from perforations from 1446 feet to 1462 feet (Penrose).

Navajo will squeeze the perforations from 1446 feet to 1462 feet, drill out cement plugs and clean out the well to 9200 feet, set 5-1/2 inch casing at 9200 feet and cement to the surface, perforate porous intervals in the Lower Wolfcamp, Cisco, and Canyon Formations between 7270 feet and 9200 feet, and conduct injectivity tests.

Attached are the Well Location Plat, Drilling Program, and Surface Use Plan.

Post ID-1
5-28-99
Re-entry

SUBJECT TO LIKE APPROVAL BY STATE AND RIGHT OF WAY APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED: Darrell Moore TITLE: Env. Mgr. DATE: 4/15/99

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY: (ORIG. SGD.) DAVID R. GLASS TITLE: PETROLEUM ENGINEER DATE: APR 27 1999

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe. NM 87505

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name	
30-015-20894		Lower Wolfcamp-Cisco-Canyon Injection Zone	
[4] Property Code	[5] Property Name		[6] Well Number
	WDW-2		
[7] OGRID No.	[8] Operator Name		[9] Elevation
	Navajo Refining Company		3607' GR

[10] Surface Location

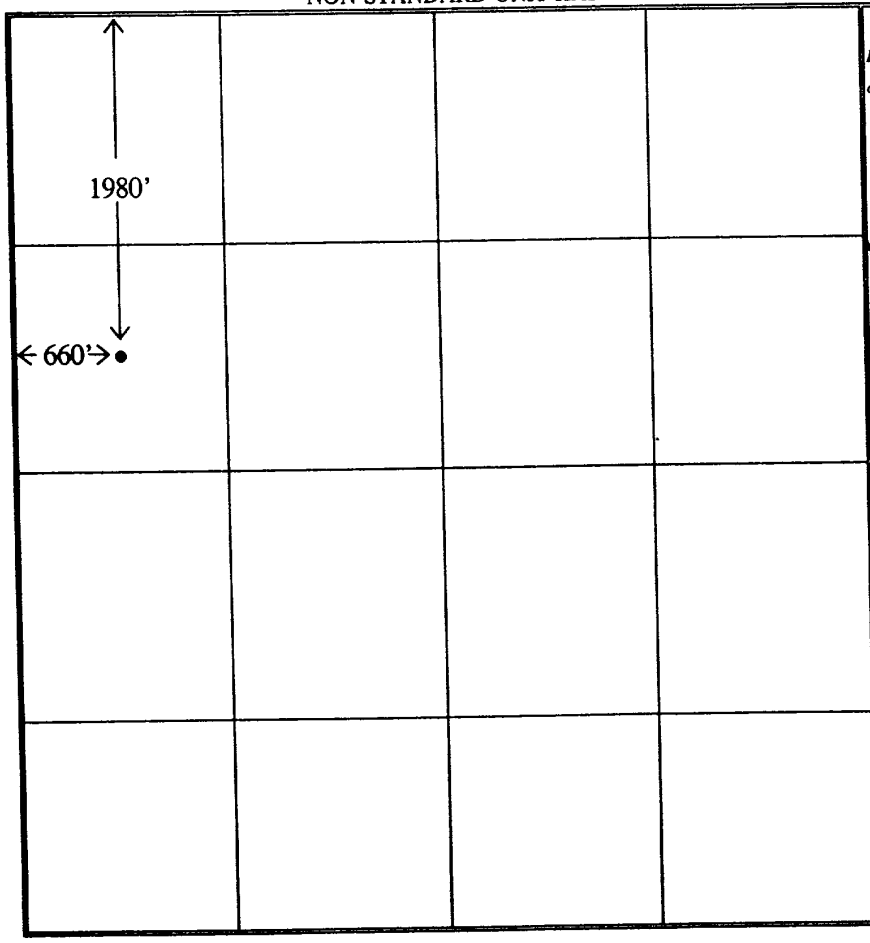
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	12	18S	27E		1980	North	660	West	Eddy

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Darrell Moore
Signature

Darrell Moore
Printed Name

Title Env. Mgr.

Date 4/08/99

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey
Signature and Seal of Professional Surveyor:

Well is active. Location was not re-surveyed by Navajo.

Certificate Number

378\Form C-102.doc

14. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Navajo Refining Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

4/12/99
Date

Darrell Moore
Signature

Darrell Moore
Name

Env. Mgr. for Water & Waste
Title

Navajo Refining Company
Company

TELEPHONE
(505) 748-3311

EASYLINK
62905278

N.M. Oil Cons. Division
811 S. 1st Street
ARTESIA, NM 88210-2834

C/SF

NAVAJO REFINING COMPANY

501 EAST MAIN STREET • P. O. BOX 159
ARTESIA, NEW MEXICO 88211-0159

FAX
(505) 746-6410 ACCTG
(505) 746-6155 EXEC
(505) 748-9077 ENGR
(505) 746-4438 P / L

May 10, 1999

RECEIVED
OCD - ARTESIA

BUREAU OF LAND MANAGEMENT
RECEIVED
MAY 13 1999
ROSWELL N.M.

Mr. Tim Gumm
State of New Mexico
Energy, Minerals and Natural
Resources Department
Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

RE: Re-Entry for Navajo Refining Company's Waste Disposal Well No. 2

Dear Mr. Gumm:

Navajo Refining Company (Navajo) has contracted Subsurface Technology, Inc. to re-enter, test and complete Waste Disposal Well No. 2 (WDW-2), formerly the Chukka Federal No. 2 operated by The Eastland Oil Company. The United States Department of the Interior, Bureau of Land Management approved the Application for Permit to Drill or Deepen on April 27, 1999. Subsequent approval from the State of New Mexico Oil Conservation Commission (OCD) was granted on Tuesday, May 4, 1999.

Navajo initiated field operations on Wednesday, May 5, 1999. The existing pumping equipment, rods, and tubing were removed from the wellbore. The perforations from 1446 feet to 1462 feet were squeezed using 100 sacks of Class 'H' cement (approximately 50 sacks of cement were displaced into the perforated interval). The cement was allowed to cure and drilled out to a total depth of 1922 feet (KB)(1911 feet below ground level).

On Sunday, May 9, 1999, the 8-5/8 inch surface casing, set from 1955 feet (KB) to surface, was pressure tested for internal mechanical integrity between 1922 feet (KB) and 30 feet (KB) using a packer set at 30 feet. The 8-5/8 inch surface casing was pressure tested to 660 pounds per square inch and monitored at the surface for one hour (Attachment A). The fluid used for testing was a clean fresh water fluid. A pressure loss of 1 psi (0.15%) was observed during the first 30 minutes of the test. A pressure loss of 2 psi (0.30%) was observed during the last 30 minutes of the test. The results from the pressure test confirmed internal mechanical integrity of the 8-5/8 inch surface casing from 1922 feet (KB) to 30 feet (KB).

The 8-5/8 inch surface casing was originally set in an 11 inch open-hole to a depth of 1955 feet (KB) and cemented to surface using 700 sacks of Class 'H' cement with 2% gel and 100 sacks of Class 'H' neat. A total of 200 sacks of cement was recorded circulated to surface. The calculated volume between an 11 inch hole and 8-5/8 inch casing is (0.2407 cubic feet per foot X 1955 feet) 471 cubic feet. The volume of cement pumped is (1.18 cubic feet per sack X 800 sacks) 944 cubic feet for an excess of 473 cubic feet or 400 sacks circulated to surface. The calculated volume of cement and apparent volume of actual cement pumped indicated excess cement was circulated to surface.

On Sunday, May 9, 1999, Halliburton Logging Services completed a cement bond and microsiesmogram (same as a variable density log) logging survey within the 8-5/8 inch casing from a wireline total depth of 1919 feet (KB) to the surface (Attachment B). The results from the survey indicate a continuous column of cement from 1922 feet to surface with good bonding characteristics. The cement behind the 8-5/8 inch casing will provide an effective hydraulic seal to prevent the movement of groundwater fluids into the underground source of drinking water with a base at 473 feet.

Please review and approve the pressure testing and cement bond log results at your earliest convenience. Navajo will proceed with the mobilization of the drilling rig Wednesday, May 12, 1999 and begin re-entry of the WDW-2 wellbore according to the approved drilling program. Navajo will periodically contact the OCD, Artesia office with a status update of the re-entry operations. The Bureau of Land Management will be notified in sufficient time for a representative to witness the cementing of the 5-1/2 inch protection casing.

Should you have any questions or concerns, please call me at (505) 748-3311.

Sincerely yours,

Darrell Moore

Darrell Moore
Environmental Manager for Water and Waste

APPROVED

JUN 02 1999

(ORIG. SGD.) DAVID R. GLASS
AUTHORIZED OFFICER, MINERALS
BUREAU OF LAND MANAGEMENT

SUBJECT TO
LIKE APPROVAL
BY STATE

c: Mr. David Glass
Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201

Mr. Brian Rogers
Subsurface Technology, Inc.
7020 Portwest, Suite 100
Houston, Texas 77024

File: Injection Wells

Patterson Drilling Company
410 N. Loraine Street — (915) 682-9401
Midland, Texas 79701

RECEIVED
JUN 0 4 1999
SUBSURFACE TECHNOLOGY, INC.

June 2, 1999

Drilling Department
Subsurface Construction Corporation
7020 Port West, Ste 100
Houston, TX 77024

RE: Inclination Report
Navajo WDW-2
Sec 12; T-18-S; R-27-E

Gentlemen:

The following is an inclination survey on the above referenced well located in Eddy County, New Mexico:

2898' – 0.25
3838' – 0.25
4783' – 0.50
6106' – 0.75
6633' – 0.50

Sincerely,

Rebecca Edwards

Rebecca A. Edwards
Administrative Assistant

STATE OF TEXAS)
)
COUNTY OF MIDLAND)

The foregoing was acknowledged before me this 2nd day of June, 1999 by Rebecca A. Edwards.

MY COMMISSION EXPIRES:

Treva Forrester
NOTARY PUBLIC

TREVA FORRESTER
NOTARY PUBLIC
STATE OF TEXAS
My Comm. Exp. 9-2-2000

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico				Northwestern New Mexico			
T. Anhy		T. Canyon	8390	T. Ojo Alamo		T. Penn. "B"	
T. Salt		T. Strawn	8894	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt		T. Atoka		T. Pictured Cliffs		T. Penn. "D"	
T. Yates		T. Miss		T. Cliff House		T. Leadville	
T. 7 Rivers		T. Devonian		T. Menefee		T. Madison	
T. Queen		T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg		T. Montoya		T. Mancos		T. McCracken	
T. San Andres	2005	T. Simpson		T. Gallup		T. Ignacio Otzte	
T. Glorieta		T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T.Tubb		T. Delaware Sand		T.Todilto		T	
T. Drinkard		T. Bone Springs		T. Entrada		T.	
T. Abo	5506	T.		T. Wingate		T.	
T. Wolfcamp	6728	T.		T. Chinle		T.	
T. Penn		T.		T. Permian		T.	
T. Cisco (Bough C)	7645	T.		T. Penn "A"		T.	

OIL OR GAS SANDS OR ZONES

No. 1, from.....to..... No. 3, from.....to.....

No. 2, from.....to..... No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology	From	To	Thickness In Feet	Lithology

Submit To Appropriate District Office
State Lease - 6 copies
Fee Lease - 5 copies
District I
1625 N. French Dr., Hobbs, NM 87240
District II
811 South First, Artesia, NM 87210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

Federal Well

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-105
Revised March 25, 1999

WELL API NO. 30-015-20894

5. Indicate Type of Lease: STATE ☐ FEE ☒ Federal

State Oil & Gas Lease No. NM 6852

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER Class I Waste Disposal Well Injecting

b. Type of Completion: NEW WELL ☐ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☒ OTHER - Recompletion

7. Lease Name or Unit Agreement Name: Navajo Refining Company WDW-2

2. Name of Operator: Navajo Refining Company

8. Well No.: WDW-2

3. Address of Operator: Post Office Box 159, Artesia, New Mexico 88211

9. Pool name or Wildcat: ~~L. Wolfcamp-Cisco-Canyon Injection Zone~~ Navajo Permo-Penn 96918

RECEIVED JUL 1999 OCD - ARTESIA

4. Well Location

Unit Letter E : 1980 Feet From The North Line and 660 Feet From The West Line

Section 12 Township 18 South Range 27 East NMPM Eddy County

10. Date Spudded	11. Date T.D. Reached	12. Date Compl. (Ready to Prod.)	13. Elevations (DF& R(B. RT, GR, etc.)	14. Elev. Casinghead
July 18, 1973	August 27, 1973	June 8, 1999	3607 feet GL, 3623 feet RKB	3609 feet GL

15. Total Depth	16. Plug Back T.D.	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By	Rotary Tools	Cable Tools
10,372 feet	8770 feet	1		All	N/A

19. Producing Interval(s), of this completion - Top, Bottom, Name: L. Wolfcamp-Cisco-Canyon

20. Was Directional Survey Made: Yes

21. Type Electric and Other Logs Run: Fracture Finder and Caliper Logs, Dual Induction Laterolog, Compensated Neutron Formation Density

22. Was Well Cored: No

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	N/A	40'	N/A	N/A	None
8-5/8"	32	1995'	11"	800 sacks circulated	None
5-1/2"	17	8869'	7-7/8"	1570 sacks circulated	None

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
3-1/2"	7528'	7528'

26. Perforation record (interval, size, and number)

7570' to 7620', 7676' to 7736', 7826' to 7834', 7858' to 7880', 7886' to 7904', 7916' to 7936', 7944' to 7964', 7990' to 8042', 8096' to 8116', 8191' to 8201', 8304' to 8319', 8395' to 8399' (2 jspf for total of 598 holes).

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
7570' to 8399'	10,000 gallons of 15% HCl, plus 4600 pounds of rock salt as diverter

28 PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping - Size and type pump)	Well Status (Prod. or Shut-in)
N/A	N/A	N/A

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil – Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
N/A	N/A	N/A		--	--	--	--

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)
--	--		--	--	--	--

29. Disposition of Gas (Sold, used for fuel, vented, etc.): N/A

Test Witnessed By:

30. List Attachments: Deviation Report

31. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief

Signature Darrell Moore Printed Name Darrell Moore Title Eng Mgr. Date 7/19/99

N.M. Oil Cons. Division
811 S. 1st Street
Artesia, NM 88210-2834

Form 3160-4
(July, 1992)

SUBMIT IN DUPLICATE (See other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: NM 6852

6. IF INDIAN, ALLOTTES OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME, WELL NO.: WDW-2

9. API WELL NO.: 30-015-20894

10. FIELD AND POOL, OR WILDCAT: Navajo Permo-Penn ~~L. Wolfcamp-Cisco-Canyon~~ 96918

11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA: Section 12, Township 18 South Range 27 East, Unit Letter E

1a. TYPE OF WELL: OIL WELL [ ] GAS WELL [ ] DRY [ ] [X] Other Class I Waste Disposal Well

1b. TYPE OF COMPLETION: NEW WELL [ ] WORK OVER [ ] DEEPEN [ ] PLUG BACK [ ] DIFF. RESVR. [X] Other Reentry

2. NAME OF OPERATOR: Navajo Refining Company

3. ADDRESS AND TELEPHONE NO.: Post Office Box 159, Artesia, New Mexico 88211

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FNL and 660' FWL Unit Letter E
At top prod. interval reported below: Same
At total depth: Same

14. PERMIT NO.: WDW-2 | DATE ISSUED: April 27, 1999

12. COUNTY OR PARISH: Eddy | 13. STATE: New Mexico

15. DATE SPUDDED: 7-18-73 | 16. DATE T.D. REACHED: 8-27-73 | 17. DATE COMP. (Ready to prod.): 6-8-99 | 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 3607' GL; 3623' RKB | 19. ELEV. CASINGHEAD: 3609' GL

20. TOTAL DEPTH, MD & TVD: 10,372' TVD | 21. PLUG, BACK T.D., MD & TVD: 8770' | 22. IF MULTIPLE COMPL., HOW MANY*: 1 | 23. INTERVALS DRILLED BY: → | ROTARY TOOLS: All | CABLE TOOLS: --

24. PRODUCING INTERVAL (S), OF THIS COMPLETION - TOP, BOTTOM NAME (MD AND TVD)*: L. Wolfcamp-Cisco-Canyon

25. WAS DIRECTIONAL SURVE MADE?: Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN: Fracture Finder and Caliper Logs, Dual Induction Laterlog, Compensated Neutron, Formation Density

27. WAS WELL CORED?: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
13-3/8"	N/A	40'	N/A	Surface	None
8-5/8"	32	1995'	11	Surface, 800 sx ClH	None
5-1/2"	17	8869'	7-7/8"	Surface, 1570 sx ClH and ClC	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
3-1/2"	7528'	7528'

31. PERFORATION RECORD (Interval, size and number)
7570'-7620', 7676'-7736', 7826'-7834'
7858'-7880', 7886'-7904', 7916'-7936'
7944'-7964', 7990'-8042', 8096'-8116'
8191'-8201', 8304'-8319', 8395'-8399'
(2 jspf for total of 598 holes)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7570' to 8399'	10,000 gallons 15% HCl, plus 4600 pounds of rock salt as diverter

PRODUCTION

DATE FIRST PRODUCTION: N/A | PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump): N/A | WELL STATUS (Producing or shut-in): N/A

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL-BBL.	GAS-MCF.	WATER-BBL.	GAS-OIL RATIO
N/A	N/A	N/A	→	--	--	--	--

FLOW. TUBING PRESS	CASING PRESSURE	24-HOUR RATE CALCULATED	OIL-BBL.	GAS-MCF.	WATER-BBL.	OIL GRAVITY-API (CORE)
N/A	N/A	→	--	--	--	--

34. DISPOSITION OF (Sold, used for fuel, vented, etc.): N/A

TEST WITNESSED BY:

35. LIST OF ATTACHMENTS: Deviation Report

ACCEPTED FOR RECORD
JUL 29 1999
(ORIG. SGD.) GARY GOURLEY

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED: Darrell Moore | TITLE: Env. Mgr. | DATE: 7/19/99

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

RECEIVED OCD - ARTESIA

Patterson Drilling Company
410 N. Loraine Street — (915) 682-9401
Midland, Texas 79701

June 2, 1999

Drilling Department
Subsurface Construction Corporation
7020 Port West, Ste 100
Houston, TX 77024

RE: Inclination Report
Navajo WDW-2
Sec 12; T-18-S; R-27-E

Gentlemen:

The following is an inclination survey on the above referenced well located in Eddy County, New Mexico:

2898' – 0.25
3838' – 0.25
4783' – 0.50
6106' – 0.75
6633' – 0.50

Sincerely,

Rebecca Edwards

Rebecca A. Edwards
Administrative Assistant

STATE OF TEXAS)
)
COUNTY OF MIDLAND)

The foregoing was acknowledged before me this 2nd day of June, 1999 by Rebecca A. Edwards.

MY COMMISSION EXPIRES:

Treva Forrester
NOTARY PUBLIC

TREVA FORRESTER
NOTARY PUBLIC
STATE OF TEXAS
My Comm. Exp. 9-2-2000

TELEPHONE
(505) 748-3311

EASYLINK
62905278

REFINING COMPANY

501 EAST MAIN STREET • P. O. BOX 159
ARTESIA, NEW MEXICO 88211-0159

FAX
(505) 746-6410 ACCTG
(505) 746-6155 EXEC
(505) 748-9077 ENGR
(505) 746-4438 P / L

July 19, 1999

Mr. James Amos
United States Department of the Interior
Bureau of Land Management
P.O. Box 1778
Roswell, NM 88220

RE: Well Completion Report for Navajo's WDW-2i in E-12-T18S, R27E

Dear Mr. Amos,

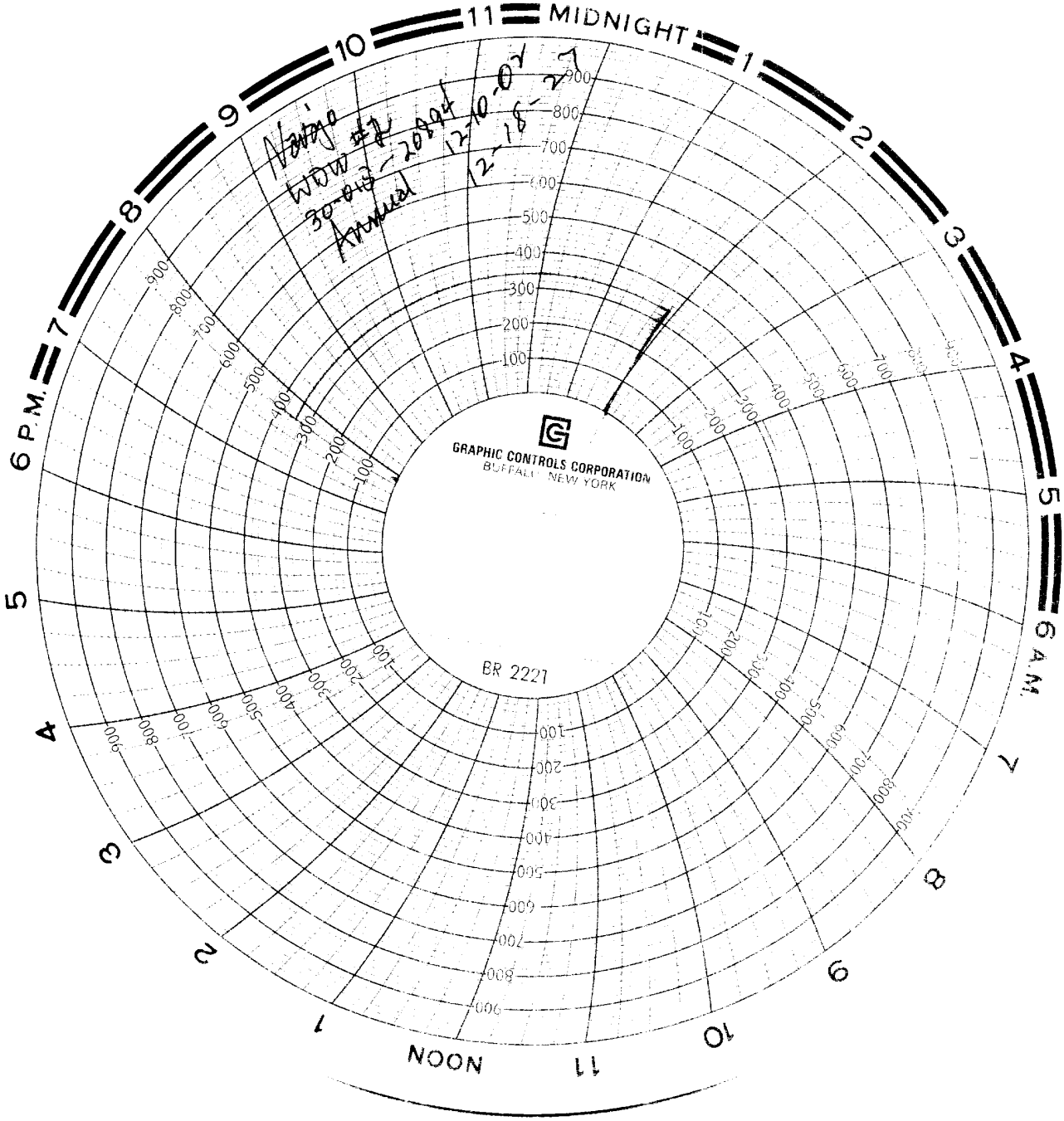
Enclosed, please find two (2) copies of form OMB Form 1004-0137 pertaining to our WDW-2 injection well. If there are any questions concerning this submission, please call me at 505-748-3311. Thank you for your time in this matter.

Sincerely,
NAVAJO REFINING COMPANY

Darrell Moore

Darrell Moore
Environmental Mgr. for Water and Waste

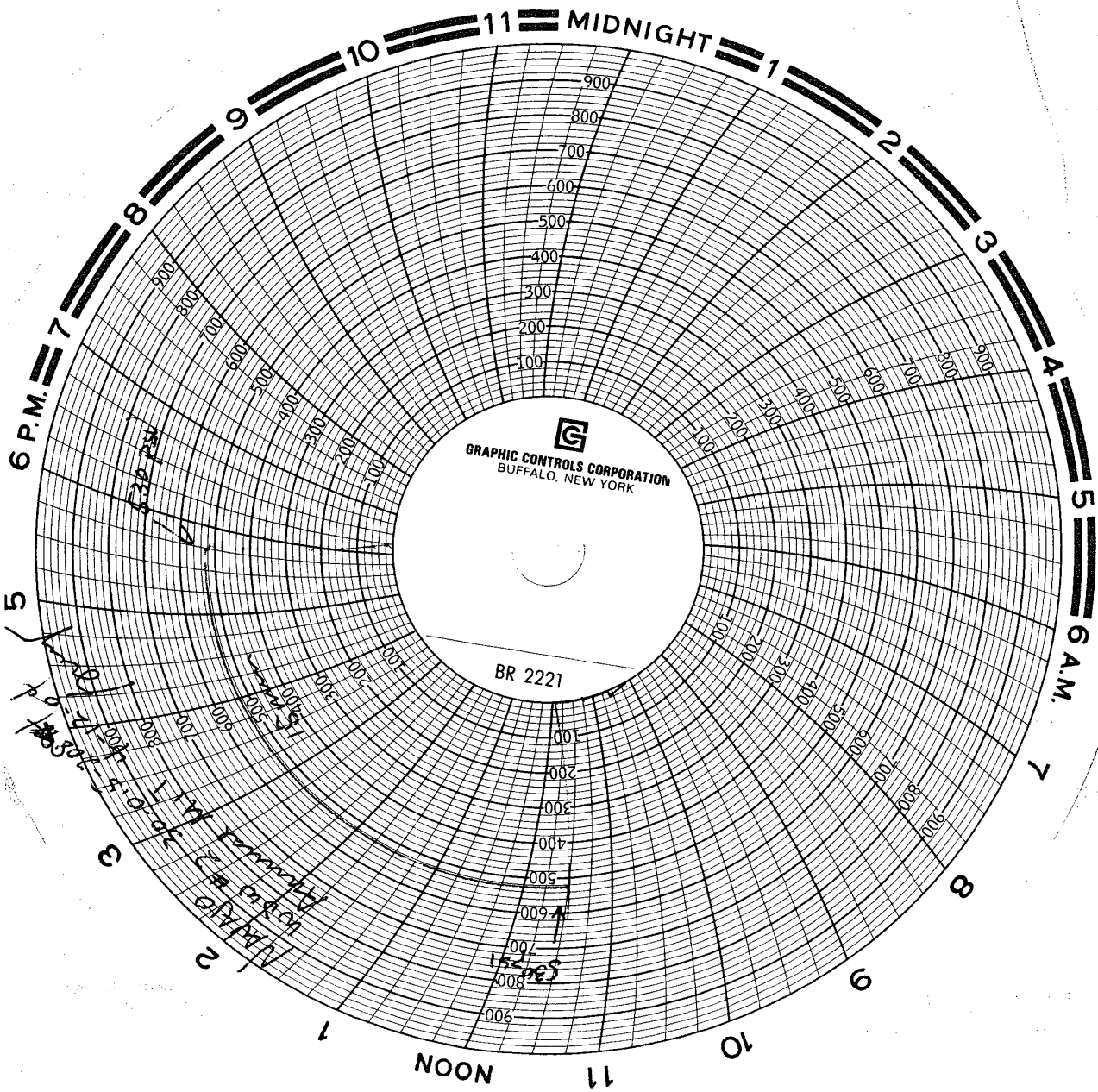
Encl.

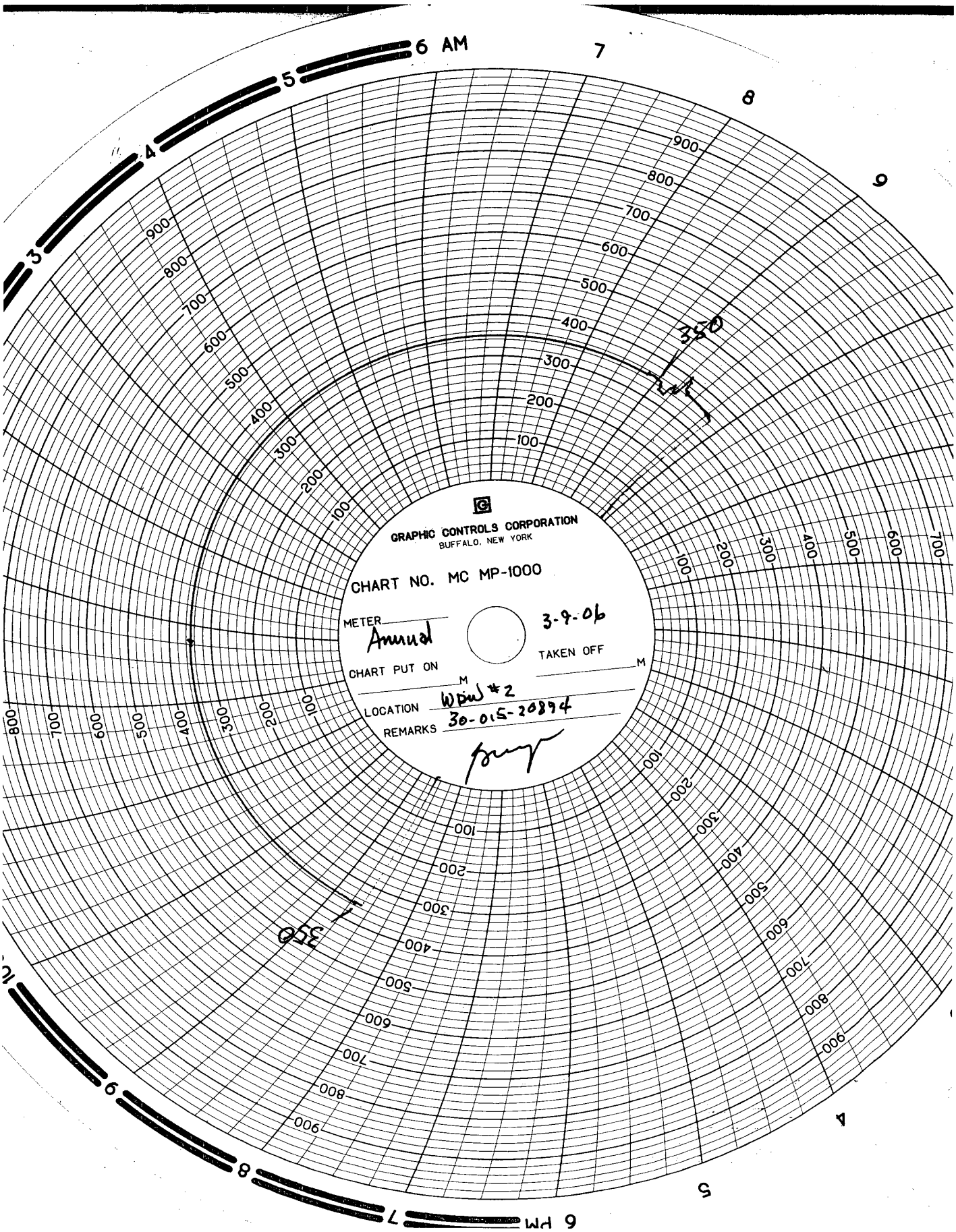

MIDNIGHT
6 A.M.
NOON
6 P.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO NEW YORK
BR 2221

RECEIVED

APR 1 5 2004

OCD-ARTESIA

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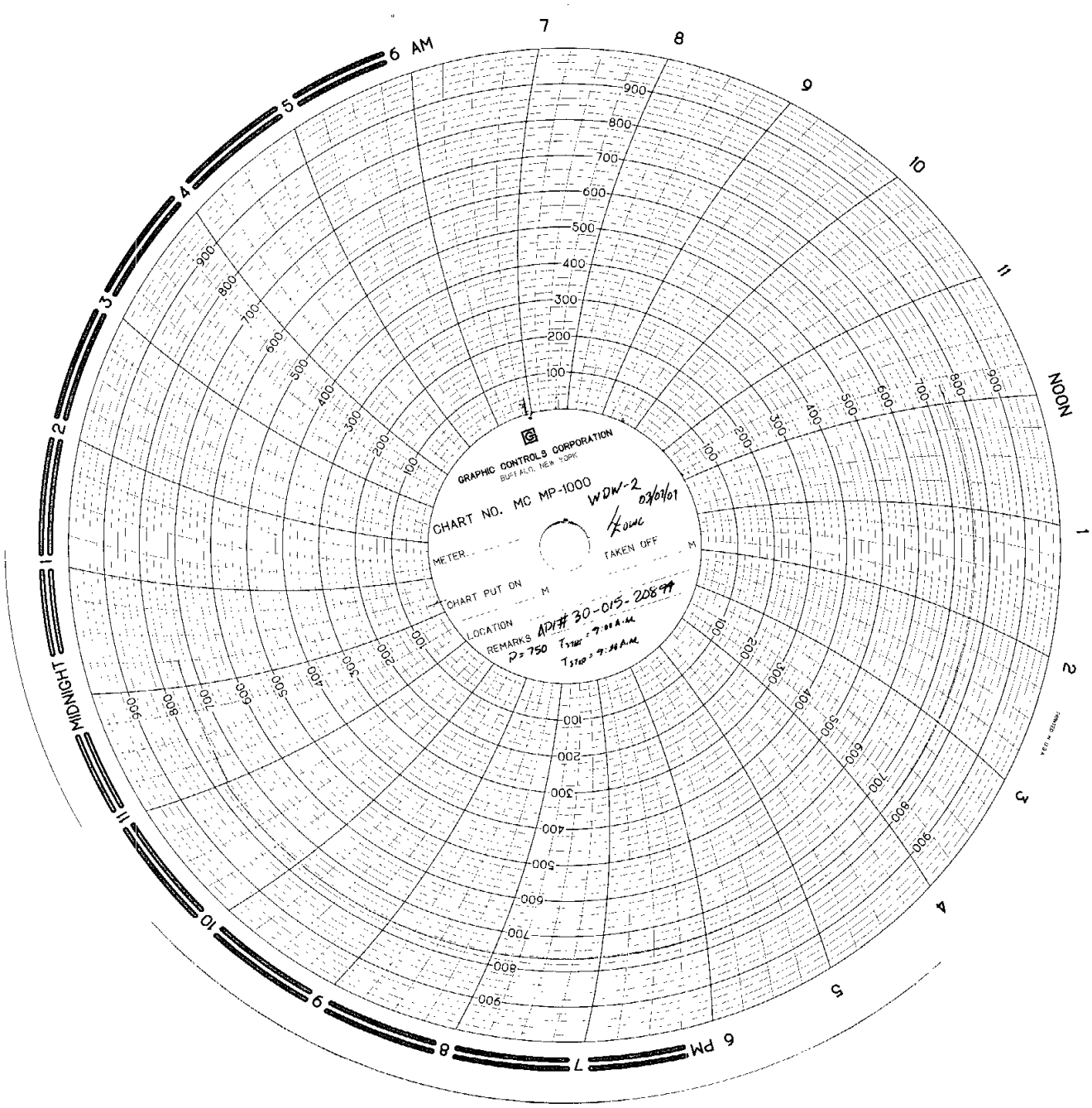
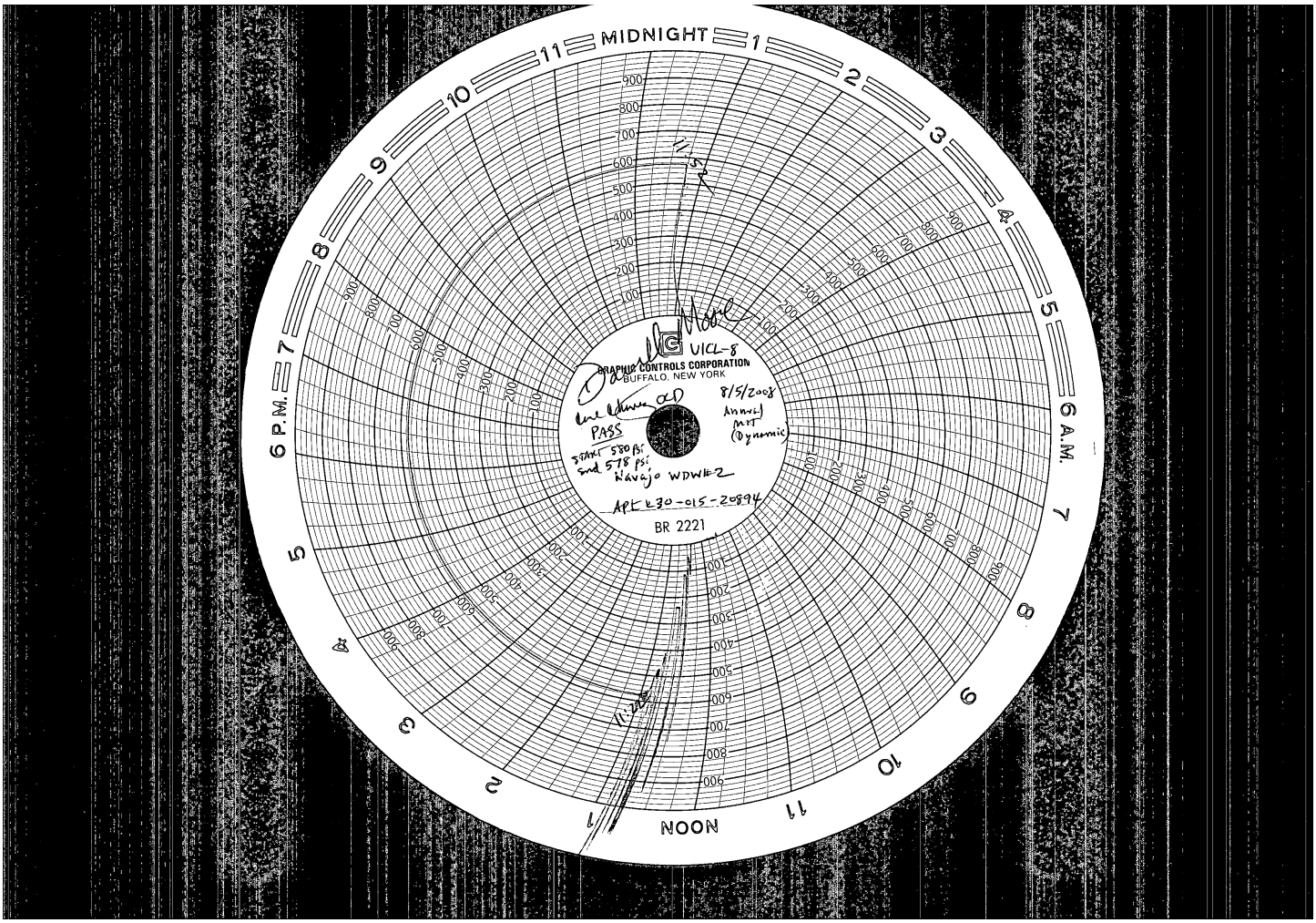
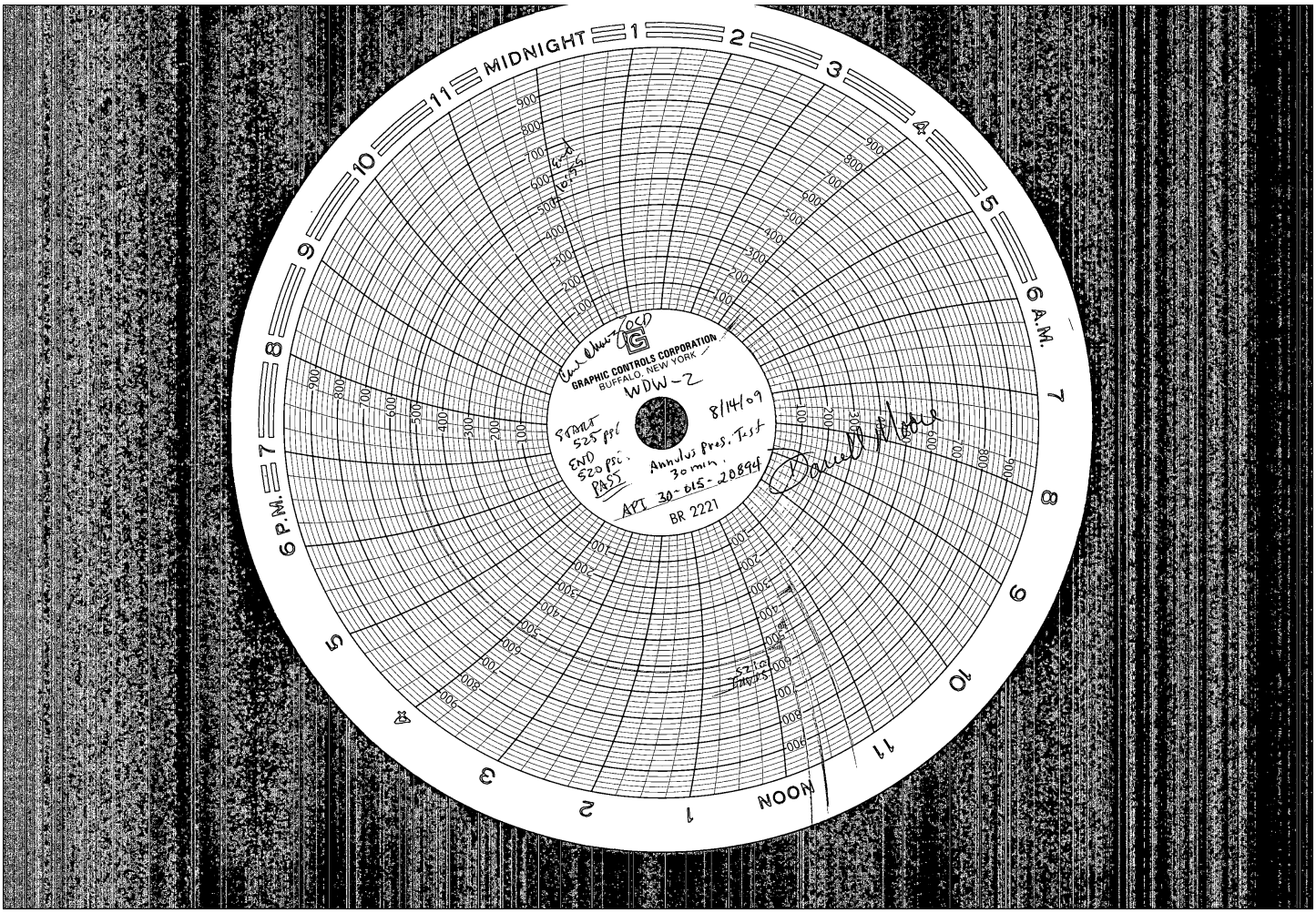
BUFFALO, NEW YORK
CHART NO. MC MP-1000
METER Annual
CHART PUT ON M
TAKEN OFF 3-9-06 M
LOCATION WPW #2
REMARKS 30-015-20894
6 AM
6 PM
350
350


GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
CHART NO. MC MP-1000
WDW-2
03/03/01
METER
TAKEN OFF
M
CHART PUT ON
M
LOCATION
REMARKS API# 30-015-20877
P=750
6 AM
NOON
MIDNIGHT
6 PM


MIDNIGHT
NOON
6 A.M.
6 P.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
VICL-8
8/5/2008
PASS
Annual MIT (Dynamic)
Start 580 psi
End 578 psi
Navajo WDW#2
API 430-015-20894
BR 2221


MIDNIGHT
NOON
6 A.M.
6 P.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
WDW-2
8/14/09
START 525 psi
END 520 psi
PASS
Annulus Pres. Test
30 min.
API 30-015-20894
BR 2221

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, August 12, 2010 1:55 PM
To: 'Moore, Darrell'; Dade, Randy, EMNRD
Cc: Lackey, Johnny
Subject: RE: Mechanical Integrity Tests

Darrell:

OCD confirms that the annual MITs performed on WDW-1 (UICI-8) and WDW-2 (UICI-8-1) passed.

Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

From: Moore, Darrell [mailto:Darrell.Moore@hollycorp.com]
Sent: Thursday, August 12, 2010 10:39 AM
To: Chavez, Carl J, EMNRD; Dade, Randy, EMNRD
Cc: Lackey, Johnny
Subject: MIT's

Carl

Attached, please find the charts for the MIT's that were performed on our Injection wells WDW-1 and WDW-2 today. Both wells passed the Mechanical Integrity Tests with no drop off in pressure. As you know, the MIT on WDW-3 was performed earlier in the year and was submitted to OCD. In addition, there was no pressure on either of the well's bradenhead. If there are any questions concerning this submission, please call me or email me. Thank you.

Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, LLC
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

NOON
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MIDNIGHT
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6 A.M.
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11
BR 2221
APL # 30-015-20694
6/12/10
Daniel Moore

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, August 12, 2010 1:55 PM
To: 'Moore, Darrell'; Dade, Randy, EMNRD
Cc: Lackey, Johnny
Subject: RE: Mechanical Integrity Tests

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Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

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Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, LLC
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

NOON
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MIDNIGHT
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6 A.M.
7
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10
11
GRAPHIC CONTROLS CORPORATION
BUFFALO NEW YORK
6/12/10

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N French Dr, Hobbs, NM 88240
District II – (575) 748-1283
811 S First St, Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd, Aztec, NM 87410
District IV – (505) 476-3460
1220 S St Francis Dr, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised August 1, 2011

	WELL API NO. **30-015-20894**
	5. Indicate Type of Lease STATE ☒ FEE ☐
	6. State Oil & Gas Lease No. **6852**
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)	7. Lease Name or Unit Agreement Name **Chukka WDW-2**
1. Type of Well: Oil Well ☐ Gas Well ☐ Other **Injection Well**	8. Well Number **WDW-2**
2. Name of Operator **Navajo Refining Company**	9. OGRID Number
3. Address of Operator **Post Office Box 159, Artesia, New Mexico 88211**	10. Pool name or Wildcat **Navajo Permo-Penn 96918**
4. Well Location Unit Letter **E** : **1980** feet from the **North** line and **660** feet from the **West** line Section **12** Township **18S** Range **27E** NMPM County **Eddy**	
	11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* **3607' GL, 3623' RKB**

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: **PERFORM PRESSURE FALLOFF TEST, ANNULUS PRESSURE TEST** ☒		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

October 17, 2011 – Perform an annulus pressure test with an initial pressure of 600 psig and run the test for 30 minutes. Install bottomhole gauges into WDW-1, WDW-2, and WDW-3 by 11:45am. Continue injection into all three wells.
October 18, 2011 – Continue injection into all three wells.
October 19, 2011 – At 12:15pm, the offset wells WDW-1 and WDW-3 will be shut-in. A constant injection rate will be established for WDW-2 and continue for a 30 hour injection period. Do not exceed 1000 psig wellhead pressure.
October 20, 2011 – At 7:00pm, WDW-2 will be shut in for a 30-hour falloff period. WDW-1 and WDW-3 will remain shut-in.
October 21,2011 – All three wells will continue to be shut in while monitoring falloff pressure in all three wells.
October 22, 2011 – At 7:00am, acquire downhole pressure gauges from all three wells. Tag bottom of fill and come out of hole very slowly, making 7-minute gradient stops while coming out of the WDW-2 every 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 ft, 3000 ft, 2000 ft, 1000 ft, surface). Run in hole with a temperature tool and conduct temperature survey from the surface to the top of the fill. Turn the wells back to Navajo personnel.

RWade 10/11/11
Accepted for record
NMOCD

RECEIVED
OCT 07 2011
NMOCD ARTESIA

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Timothy Jones TITLE Project Engineer DATE 10/3/2011

Type or print name Timothy Jones E-mail address: tjones@subsurfacegroup.com PHONE: 713-880-4640

For State Use Only

APPROVED BY:_____ TITLE_____ DATE_____

Conditions of Approval (if any):

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised August 1, 2011

WELL API NO. **30-015-20894**

5. Indicate Type of Lease STATE ☒ FEE ☐

6. State Oil & Gas Lease No. **6852**

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name **Chukka WDW-2**

1. Type of Well: Oil Well ☐ Gas Well ☐ Other **Injection Well**

8. Well Number **WDW-2**

2. Name of Operator **Navajo Refining Company**

9. OGRID Number

3. Address of Operator **Post Office Box 159, Artesia, New Mexico 88211**

10. Pool name or Wildcat: **Navajo Permo-Penn 96918**

4. Well Location
Unit Letter **E** : **1980** feet from the **North** line and **660** feet from the **West** line
Section **12** Township **18S** Range **27E** NMPM County **Eddy**

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* **3607' GL, 3623' RKB**

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: **PERFORM PRESSURE FALLOFF TEST, ANNULUS PRESSURE TEST** ☒		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

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Spud Date: ☐ Rig Release Date: ☐

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Timothy Jones TITLE Project Engineer DATE 10/3/2011

Type or print name Timothy Jones E-mail address: tjones@subsurfacegroup.com PHONE: 713-880-4640

For State Use Only

APPROVED BY: Carl J. Chavez TITLE Environmental Engineer DATE 10/19/2011

Conditions of Approval (if any): See E-mail conditions dated 10/19/2011 attached to WDW-1.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, October 19, 2011 4:06 PM
To: 'Moore, Darrell'
Cc: Sanchez, Daniel J., EMNRD; VonGonten, Glenn, EMNRD; Dade, Randy, EMNRD
Subject: Navajo Refining Company UIC Class I (NH) Injection Wells WDWs 1, 2 & 3 (UICI-008) Fall Off Test Plan (August 2011)

Darrell:

The New Mexico Oil Conservation Division (OCD) is in receipt of your above subject test plan. OCD has already approved the Fall-Off Test (FOT) Plan with conditions on July 28, 2009. The OCD notes that it is also in the process of reviewing C-103s Sundry Notices for the upcoming FOTs.

OCD observes some changes in this FOT Plan submittal that are not acceptable to the OCD. For example, Exhibit 1 is not an acceptable exhibit to the OCD for reasons specified in the 2010 FOT report review and later during the May 2011 meeting in Santa Fe. However, the operator continues to submit exhibits with certain assumptions that have not been accepted or approved by the OCD; i.e., that the injection wells are show interconnection with the injection zone during past FOTs. Perhaps the operator can conduct the 2011 FOT with the information and exhibits needed to prove the interconnection of injection wells with the injection zone? The Certified PE should provide the exhibits in the 2011 FOT Report with the analysis and conclusions supporting any claims for the OCD to review and consider before approving. This is apparently a FOT frequency per well issue that the operator is attempting to prove.

The OCD provides the following comments, observations, and/or recommendations on the above subject plan below.

Comments:

- The OCD approved the original Fall-Off Test (FOT) Plan based on OCD Guidance dated December 3, 2007. There should not be any significant changes to this FOT Plan because it is flexible where needed to allow operators to implement it on each injection well.
- OCD likes to be notified to witness the installation of bottom hole gauges and to be present at least one hour before injection shut-off and commencement of FOT monitoring.
- OCD is concerned about the Section VI No. 1(e) WDW-3 Cement Bond Log quality being poor from 900 ft. to 1200 ft- especially at the depths: 2662 – 2160; 4876 – 5372; and 6750 – 7600 ft. micro annulus scenario.

Observations:

- Section V No. 2: The objective of the FOT is NOT to achieve or limit a 100 psig pressure differential before vs. after FOT injection vs. shut-off, but it is a minimum pressure differential that OCD stipulates in its guidance for a successful FOT and injection zone that may still continue to be utilized for disposal, i.e., not too pressured up and subject to continued fracturing under daily allowed maximum surface injection pressure operational limits.
- Section V No. 7 and Exhibit 1: OCD observes a bottom hole pressure chart for WDWs 1, 2 and 3 at 7660 feet that the operator presented in the 2010 FOT and again during a May 2011 meeting in Santa Fe, New Mexico to show the interconnection between injection wells and the injection formation. The OCD had commented that there was no explanation or conclusion provided from the Certified PE who conducted and completed the 2010 FOT report that supports the operator's claim that all injection wells are interconnected based on Exhibit 1.

  Furthermore, the OCD requested a statement or information supporting the operator's claim by the Certified PE, but never received one. At the meeting, the OCD explained that based on Exhibit 1, there was no support for the claim. In order to make the interconnection determination, during each FOT at each well and off-set injection wells (WDWs not being FOT'd) before and throughout the FOT would need bottom hole pressures monitored in tandem at each well location to establish the interconnectivity of the injection wells with the receiving injection formation under a uniform time scale. This would be a chart that could be plotted that would show during the test the interconnectivity of the wells for each FOT. The OCD doubts that the operator can make the case for interconnectivity between injection wells and injection formation because of the significant distance between the injection wells and fact that sedimentation in formation varies laterally and uniformity in sedimentation, saturated porosity and permeability due to variation in sedimentation would by chance make the injection formation aerially extensive and uniform over a 3 to 5 mile radius from each injection well. Also, even if by chance there was

uniformity over the mileage specified, the distance between injection wells and corresponding pressure would likely not be observed.

- Exhibit 6: OCD observes in Section B a proposed MIT once every 5 years. OCD's UIC Program requires annual MITs and/or after down hole work is performed on a well.

Recommendations:

- Operator is running survey logs to the bottom of fill or below USDW (fresh water) zones, which excludes an evaluation of casing in the fresh water zone. Please run logs up to surface.
- Be sure to also record and provide injection flow rate and pressure leading up to shut-off and monitoring throughout the FOT monitoring period. OCD needs to confirm that a pseudo steady-state condition was achieved before shut-off. This data is also needed for software modeling of the FOT.
- Please provide electronic data from the FOTs at each well in order for the OCD to run its software model to confirm the results in the report.
- Section V No. 13: Surface pressure monitoring and Horner Plot during injection should be used to confirm radial flow condition is achieved instead of waiting a set period if operator wishes to reduce the injection period.

Disclaimer: *Please be advised that OCD has already approved with conditions Navajo Refining Company's Fall-Off Test (FOT) Plan on July 28, 2009, and is not providing approval of this FOT Plan; however, comments, observations and recommendations herein should help Navajo Refining Company understand the OCD's concerns based on the submittal.*

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/
"Why not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward with the Rest of the Nation?" To see how, go to "Pollution Prevention & Waste Minimization" at:
http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental)

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This page could not be displayed in the View All.

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised August 1, 2011

WELL API NO.
30-015-20894

5. Indicate Type of Lease
STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
BLM

1. Type of Well: Oil Well ☐ Gas Well ☐ Other (Class 1 NH Injection Well)

8. Well Number WDW-2

2. Name of Operator
Navajo Refining Company L.L.C.

9. OGRID Number

3. Address of Operator
501 East Main Street, Artesia, NM

10. Pool name or Wildcat
Lwr Wolfcamp-Cisco-Canyon Inj. Zone

4. Well Location
Unit Letter: 1980 feet from the North line and 660 feet from the West line
Section 12 Township 18 S Range 27 E NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
GL: 3,607 feet, RKB: 3,6223 feet

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☒	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
OTHER:	☐			OTHER:	☐		

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Navajo proposes to add perforations in the existing injection interval at 7800 feet – 7830 feet, 8050 feet – 8290 feet. These perforations would be added in the existing, approved, injection interval in Chukka WDW-2.

NOTE: Work is proposed to be performed in July 2013.

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Timothy Jones TITLE Project Engineer DATE 6-13-2013

Type or print name Timothy Jones E-mail address: tjones@subsurfacegroup.com
PHONE: 713-880-4640

For State Use Only

APPROVED BY: Curly Chavez TITLE Environmental Engineer DATE 6/18/2013
Conditions of Approval (if any):

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised August 1, 2011

WELL API NO. 30-015-20894	
5. Indicate Type of Lease STATE ☐ FEE ☐	
6. State Oil & Gas Lease No.	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	7. Lease Name or Unit Agreement Name BLM
1. Type of Well: Oil Well ☐ Gas Well ☐ Other (Class 1 NH Injection Well)	8. Well Number WDW-2
2. Name of Operator Navajo Refining Company L.L.C.	9. OGRID Number
3. Address of Operator 501 East Main Street, Artesia, NM	10. Pool name or Wildcat Lwr Wolfcamp-Cisco-Canyon Inj. Zone

4. Well Location
Unit Letter: 1980 feet from the North line and 660 feet from the West line
Section 12 Township 18 S Range 27 E NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
GL: 3,607 feet, RKB: 3,6223 feet

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☒	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: ☐		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

A caliper survey will be conducted on the 3-1/2-inch injection tubing. The caliper survey is scheduled to be performed on June 19, 2013.

Navajo will conduct an acid stimulation of the injection interval in the WDW-2 to increase injectivity into the permitted injection zone. The stimulation fluid will consist of 20,244 gallons of 15% HCl acid injected into the perforated interval of 7,270 to 8,894 feet RKB. The acid will be injected into the well using coil tubing equipment.

NOTE: Work is expected to be performed in June and July 2013.

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Timothy Jones TITLE Project Engineer DATE 6-13-2013

Type or print name Timothy Jones E-mail address: tjones@subsurfacegroup.com
PHONE: 713-880-4640

For State Use Only

APPROVED BY: Carl J. Chavez TITLE Environmental Engineer DATE 6/18/2013
Conditions of Approval (if any):

SUBSURFACE

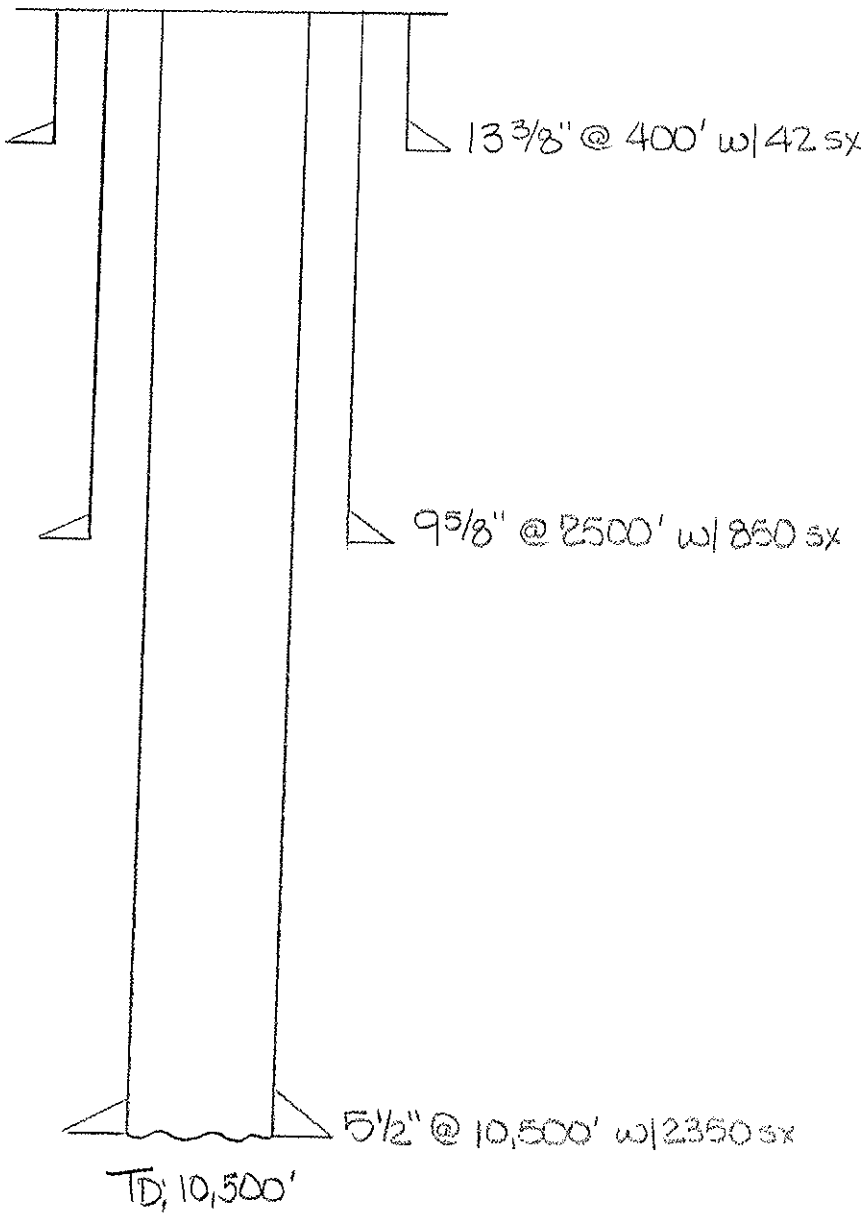
NAVAJO REFINING COMPANY
Map ID No. 35
Artificial Penetration Review

OPERATOR Yates Petroleum Co.
LEASE Violet Blu State Com
WELL NUMBER 1
DRILLED NA
PLUGGED NA

STATUS New Gas
LOCATION Sec. 14 -T18S-R27E
MUD FILLED BOREHOLE NA
TOP OF INJECTION ZONE NA
API NO. 30-015- 40187

REMARKS: Not yet drilled. Proposed 10,500'

Proposed Casing



Map ID 35

District I
1625 N French Dr, Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
811 S First St, Artesia, NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1220 S St Francis Dr, Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised December 16, 2011

RECEIVED
FEB 15 2012
NMOCD ARTESIA

Permit

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address	[2] OGRID Number
Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210	025575
	[3] API Number 30-015-40187

[4] Property Code	[5] Property Name	[6] Well No.
35452	Violet BIV State Com	1

[7] Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
A	14	18S	27E	A	660	North	990	East	Eddy

[8] Pool Information

Wildcat Chester	97825

Additional Well Information

[9] Work Type	[10] Well Type	[11] Cable/Rotary	[12] Lease Type	[13] Ground Level Elevation
N	G	Rotary	State	3540' GL
[14] Multiple	[15] Proposed Depth	[16] Formation	[17] Contractor	[18] Spud Date
N	10,500	Chester	Not Determined	ASAP

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water

[19] Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
New	17.5	13.375	48#	400'	425	0
New	12.25	9.625	36#	2500'	850	0
New	8.75	5.5	15.5#	10500'	2350	0

Casing/Cement Program: Additional Comments

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000#	5000#	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief
I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☒

Signature: Cy Cowan

Printed name: Cy Cowan

Title: Land Regulatory Agent

E-mail Address: cy@yatespetroleum.com

Date: 02/14/2012 Phone: 575-748-4372

OIL CONSERVATION DIVISION

Approved By: T. C. Shepard

Title: Geologist

Approved Date: 4/18/2012 Expiration Date: 4/18/2014

Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED
FEB 15 2012
NMOCD ARTESIA

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-40187	97825	WILDCAT; CHESTER

[4] Property Code	[5] Property Name	[6] Well Number
35452	VIOLET BIV STATE COM	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
025575	YATES PETROLEUM CORPORATION	3540

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	14	18-S	27-E		660	NORTH	990	EAST	EDDY

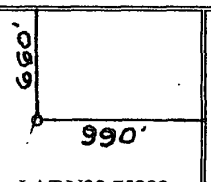
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acre	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320 E2			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16



LAT N32.75293
LON W104.24397

[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: [signature] Date: 02/14/12

Cy Cowan
Printed Name

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

FEBRUARY 6, 2006
Date of Survey

Signature and Seal of Professional Surveyor: [signature]

DAN R. REDDY NEW MEXICO 5412 REGISTERED PROFESSIONAL SURVEYOR

Certificate Number
DAN R. REDDY NM PE&PS #5412

SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 36
Artificial Penetration Review

OPERATOR Yates Petroleum Co.
LEASE Violet BIV State Com
WELL NUMBER 1C
DRILLED NA
PLUGGED NA

STATUS Cancelled App
LOCATION Sec. 14 -T18S-R27E
MUD FILLED BOREHOLE NA
TOP OF INJECTION ZONE NA
API NO. 30-015- 36939

REMARKS:
Proposed TD: 10,500'

Map ID 36

District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr , Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

FEB 13 2009

Form C-101
June 16, 2008

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address	[2] OGRID Number
Yates Petroleum Corporation 105 S 4th Street Artesia, NM 88210	025575
	[3] API Number 30-015-36939

[3] Property Code	[5] Property Name	[6] Well No
~~34452~~ 35452	Violet BIV State Com	1

[9] Proposed Pool 1	[10] Proposed Pool 2
Chester	

[7] Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	14	18S	27E	A	660'	North	990'	East	Eddy

[8] Proposed Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	G		S	3540'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
N	10,500'	Chester	Not Determined	ASAP

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17.12	13 375	48#	400'	425 sx	0
12 25	9 625	36#	2500'	850 sx	0
8 75	5.5	15 5#	10500	2350 sx	0

[22] Describe the proposed program If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone Describe the blowout prevention program, if any Use additional sheets if necessary

Yates Petroleum Corporation proposes to drill and test the Chester/intermediate formations. Approximately 400' of surface casing will be set and cement circulated Intermediate casing will be set at 2500', cement circulated to surface If commercial, production casing will be ran can cemented, perforated and stimulated as need to gain production

MUD PROGRAM: 0-400' FW Gel; 400'-2500' Brine Water, 2500'-9600' Cut Brine; 9600'-10500' Salt Gel/Starch/ 4-6%KCL

BOPE PROGRAM: a 5000# BOPE will be installed on the 9.625" casing and tested daily for operational..

Sources at YPC have relayed information to me that they believe there will not be enough H2S found from the surface to the Chester formation to meet the OCD's minimum requirements for the submission of a contingency plan per Rule 118.

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief

Signature	OIL CONSERVATION DIVISION
Printed name: Cy Cowan	Approved by: Jacqui Reeves
Title: Regulatory Agent	Title: District II Geologist
E-mail Address: cy@yatespetroleum.com	Approval Date: 2/23/09 — Expiration Date: 2/23/2011
Date: February 6, 2009 — Phone: (575) 748-4372	Conditions of Approval Attached ☐

ENTERED

Map ID 36

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-36939		Chester WildCat

[4] Property Code	[5] Property Name	[6] Well Number
35452	Violet BIV State Com	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
025575	Yates Petroleum Corporation	3540'

[10] Surface Location

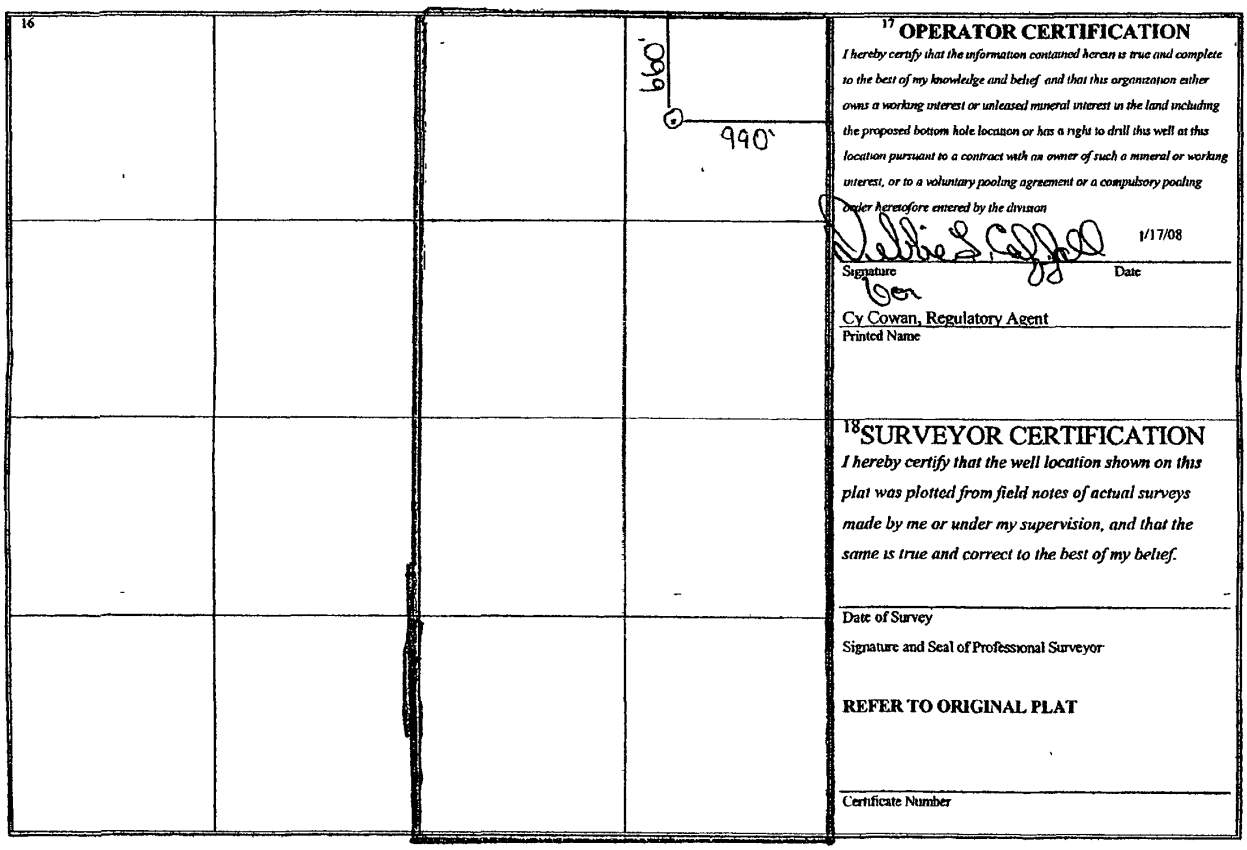
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	14	18S	27E		660'	North	990'	East	Eddy

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320 E2			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division

Signature — Date: 1/17/08

Cy Cowan, Regulatory Agent
Printed Name

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey

Signature and Seal of Professional Surveyor

REFER TO ORIGINAL PLAT

Certificate Number

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
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Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-		

[4] Property Code	[5] Property Name	[6] Well Number
35452	VIOLET BIV STATE COM	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
25575	YATES PETROLEUM CORPORATION	3540

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	14	18-S	27-E		660	NORTH	990	EAST	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acre	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

[16]

660'
990'
LAT N32.75293
LON W104.24397

[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature Date

for C-V Cowan
Printed Name

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

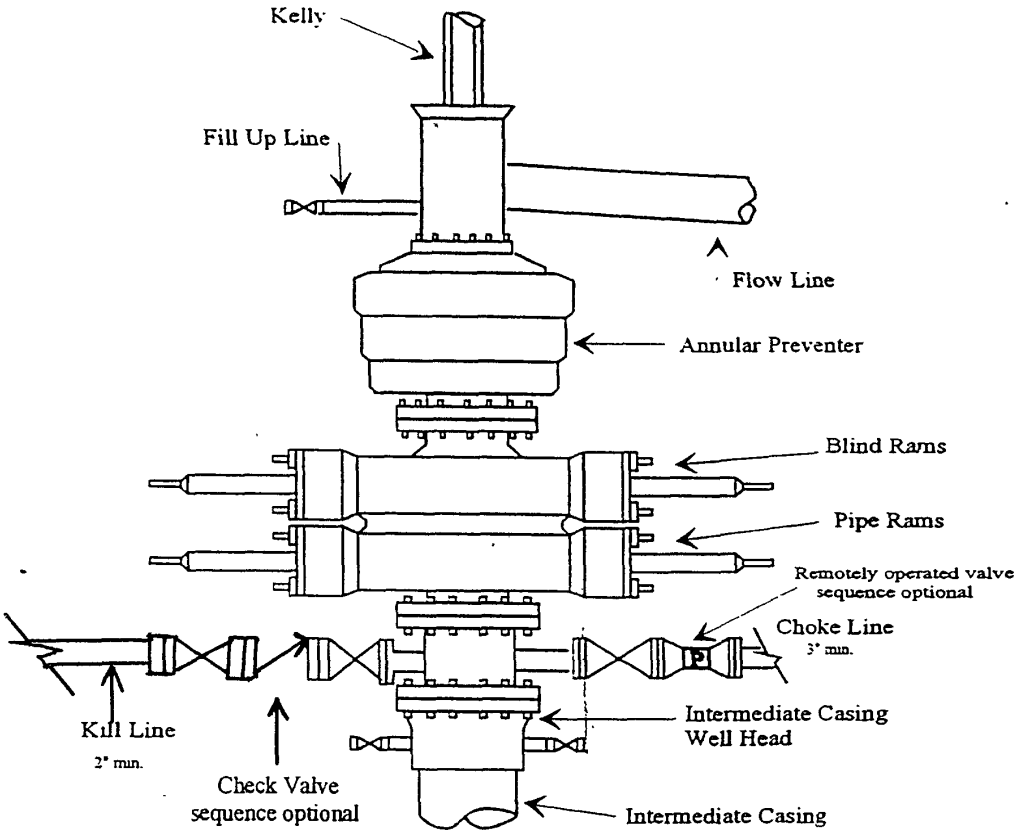
FEBRUARY 6, 2006
Date of Survey
Signature and Seal of Professional Surveyor

DAN R. REDDY NEW MEXICO 5412 PROFESSIONAL SURVEYOR

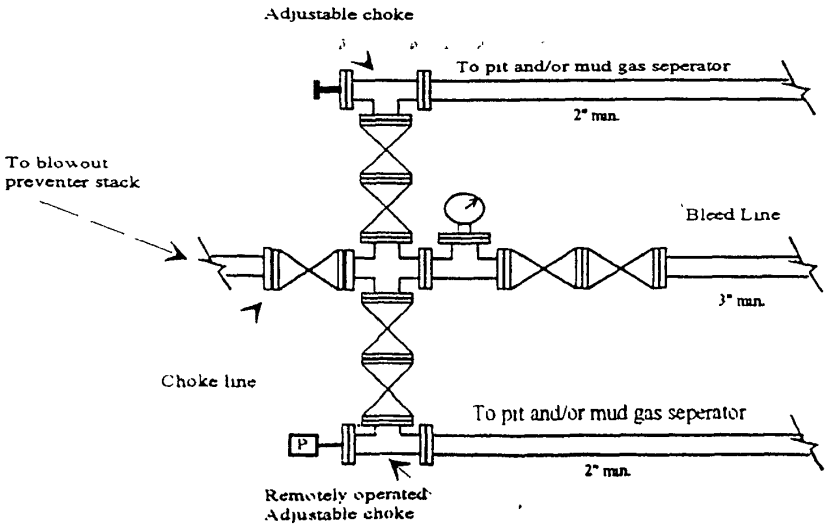
Certificate Number
DAN R. REDDY NM PE/PS #5412

Yates Petroleum Corporation

Typical 5,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack



Typical 5,000 psi choke manifold assembly with at least these minimun features



District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144 CLEZ
July 21, 2008

For closed-loop systems ***that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure,*** submit to the appropriate NMOCD District Office.

Closed-Loop System Permit or Closure Plan Application

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Type of action: ☒ Permit ☐ Closure

Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances

1.
Operator: Yates Petroleum Corporation OGRID #: 025575
Address: 105 South Fourth Street, Artesia, New Mexico 88210
Facility or well name: Violet BJV State Com #1 30-015-36939
API Number: ~~30-015-34632~~ OCD Permit Number:
U/L or Qtr/Qtr A Section 14 Township 18S Range 27E County: Eddy
Center of Proposed Design: Latitude N32.75293 Longitude W104.24397 NAD: ☒1927 ☐ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Operation: ☒ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) ☐ P&A
☐ Above Ground Steel Tanks or ☒ Haul-off Bins

3.
Signs: Subsection C of 19.15.17.11 NMAC
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
☒ Signed in compliance with 19.15.3.103 NMAC

4.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.
☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☒ Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
☐ Previously Approved Design (attach copy of design) API Number:
☐ Previously Approved Operating and Maintenance Plan API Number:

5.
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)
Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.
Disposal Facility Name: Gandy Marley Disposal Facility Permit Number: NM-01-0019
Disposal Facility Name: CRI Disposal Facility Permit Number: R-9166
Disposal Facility Name: Lea Land Disposal Facility Permit Number: NM-1-035

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☒ No

Required for impacted areas which will not be used for future service and operations.
☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

0209130

6.
Operator Application Certification:
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Cy Cowan Title: Regulatory Agent
Signature: Date: 2/6/09
e-mail address: cy@yatespetroleum.com Telephone: 575-748-4372

7.
OCD Approval: ☒ Permit Application (including closure plan) ☐ Closure Plan (only)
OCD Representative Signature: Jacqui Reaves **Approval Date:** 02-24-09
Title: District II Geologist **OCD Permit Number:** 0209136

8.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC
Instructions: *Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.*
☐ **Closure Completion Date:**

9.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
Instructions: *Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.*
Disposal Facility Name: Disposal Facility Permit Number:
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Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:
☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

10.
Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Title:
Signature: Date:
e-mail address: Telephone:

Yates Petroleum Corporation
Closed Loop System

Equipment Design Plan

Closed Loop System will consist of:
1 – double panel shale shaker
1 – (minimum) Centrifuge, certain wells and flow rates may require 2 centrifuges
On certain wells, the Centrifuge will be replaced by a Clackco Settling Tank System
1 – minimum centrifugal pump to transfer fluids
2- 500 bbl. FW Tanks
1 – 500 bbl. BW Tank
1 – half round frac tank – 250 bbl. capacity as necessary to catch cement / excess mud returns generated during a cement job.
1 Set of rail cars / catch bins
Certain wells will use an ASC Auger Tank

Operation Plan

All equipment will be inspected at least hourly by rig personnel and daily by contractors personnel.
Any spills / leaks will be reported to YPC, NMOCD, and cleaned up without delay.

Closure Plan

Drilling with Closed Loop System, haul off bins will be taken to Gandy Marley, CRI and Lea Land Farm.

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
June 16, 2008

	WELL API NO. 30-015-36939
	5. Indicate Type of Lease STATE ☒ FEE ☐
	6. State Oil & Gas Lease No. VA-2131
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	7. Lease Name or Unit Agreement Name Violet BIV State Com
1. Type of Well: Oil Well ☐ Gas Well ☒ Other	8. Well Number 1
2. Name of Operator Yates Petroleum Corporation	9. OGRID Number 25575
3. Address of Operator 105 S. 4th Street, Artesia, New Mexico 88210	10. Pool name or Wildcat Chester
4. Well Location Unit Letter A 660 feet from the North line and 990 feet from the East line Section 14 Township 18S Range 27E NMPM County Eddy	
	11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3540' GR

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
OTHER: ☐		OTHER: **Extend APD** ☒	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Yates Petroleum Corporation wishes to extend the Application for Permit to Drill for ~~two~~ one year~~s~~ until February 23, 201~~8~~2.

Thank you,

Current NMOCD rules and regulations must be met at time of drilling

Final Extension
APPROVED FOR 1 YEAR
EXPIRES: 2/23/2012

RECEIVED
JAN 19 2011
NMOCD ARTESIA

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE M Sanders TITLE Land Regulatory Technician DATE January 14, 2011

Type or print name Monti Sanders E-mail address montis@yatespetroleum.com PHONE: (575) 748-4244

For State Use Only

APPROVED BY: David Gray TITLE Field Supervisor DATE 1-26-11

Conditions of Approval (if any):

District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
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Form C-144 CLEZ
July 21, 2008

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API Number: 30-015-36939 OCD.Permit Number: 209130

U/L or Qtr/Qtr A Section 14 Township 18S Range 27E County: Eddy

Center of Proposed Design: Latitude N32.75293 Longitude W104.24397 NAD: ☒1927 ☐ 1983

Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

RECEIVED
FEB 15 2012
NMOCD ARTESIA

2.

☒ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC

Operation: ☒ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) ☐ P&A

☐ Above Ground Steel Tanks or ☒ Haul-off Bins

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☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

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0209130

6

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I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Cy Cowan Title: Regulatory Agent

Signature: Date: 2/6/09

e-mail address: cy@yatespetroleum.com Telephone: 575-748-4372

7.

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OCD Representative Signature: Jacqui Reeves **Approval Date:** 02-24-09

Title: District II Geologist **OCD Permit Number:** 02091130

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Name (Print): Title:

Signature: Date:

e-mail address: Telephone.

Yates Petroleum Corporation
Closed Loop System

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Closure Plan

Drilling with Closed Loop System, haul off bins will be taken to Gandy Marley, CRI and Lea Land Farm.

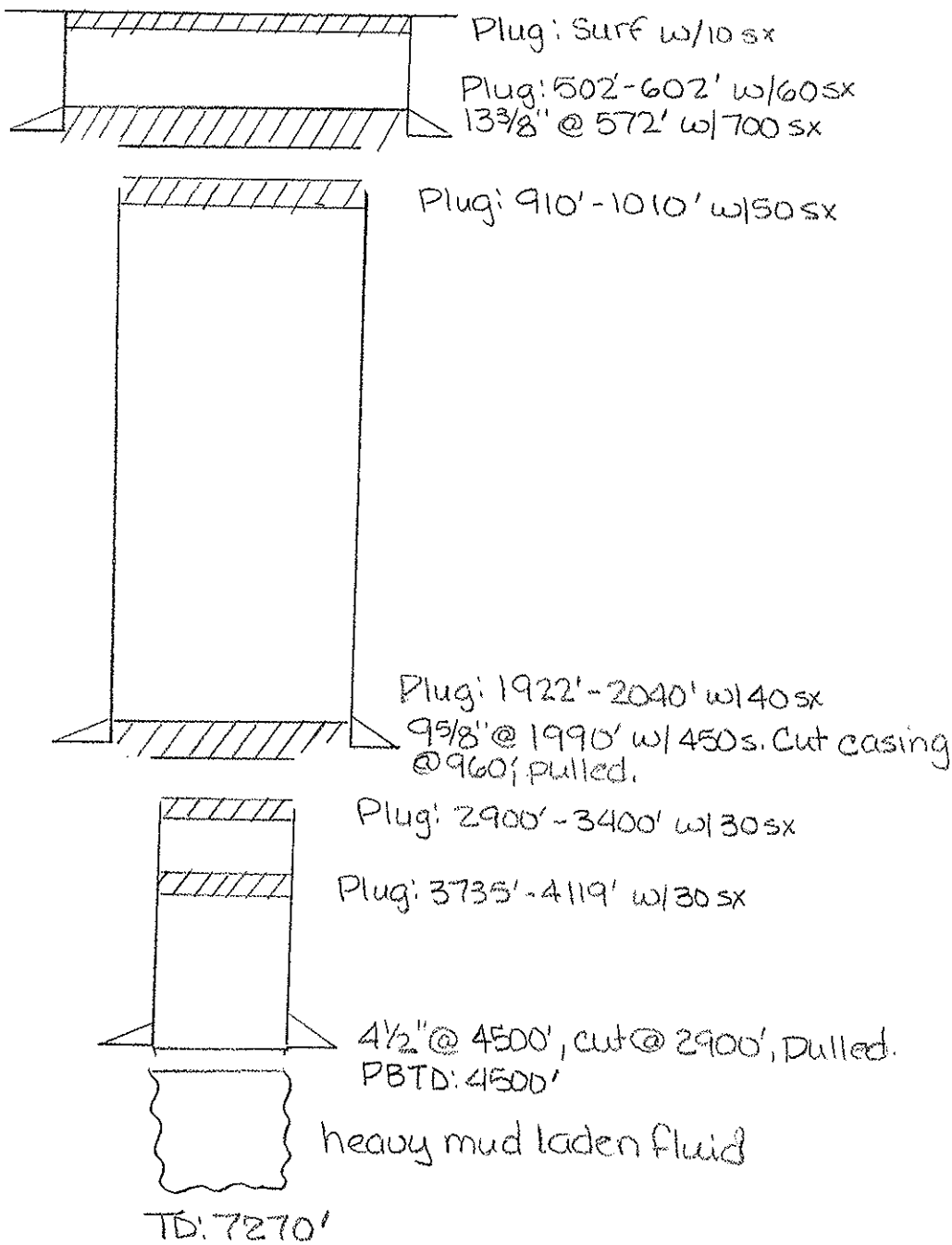
SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 37
Artificial Penetration Review

OPERATOR Pre-Ongard Well Op.
LEASE Pre-Ongard
WELL NUMBER 1
DRILLED NA
PLUGGED 10-10-73

STATUS Plugged
LOCATION Sec. 11 -T18S-R27E
MUD FILLED BOREHOLE NA
TOP OF INJECTION ZONE ~7148'
API NO. 30-015- 00870

REMARKS: No casing into Injection Zone.



Map ID 37

Budget Bureau 42-R358.3.
Approval expires 12-31-55.

Form 9-331a
(Feb. 1951)

		X	

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Las Cruces

Lease No.

Unit

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	X	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Ruth C. McPherson August 23, 1956

Well No. 1 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 11

NW/4 of SE/4 Sec. 11 (¼ Sec. and Sec. No.) T-18-S (Twp.) R-27-E (Range) N M P M (Meridian)

Wildcat (Field) Eddy (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is ..... ft. To be reported later.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

We propose to drill the above well with rotary tools to an approximate depth of 7,000' to test abo and top of Wolfcamp. Casing program will be as follows:

Size of Hole	Size of Casing	Depth	Cement
17-1/2"	13-3/8	500	200% of theoretical amount to circulate to surface.
12-1/4"	9-5/8	2000	150% to top of Queen from Caliper survey containing 6% gel, 1/ tuf plug per sack + 100 sacks neat.
8-3/4"	5-1/2	7000	300 sacks cement.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Stanolind Oil and Gas Company

Address Box 68

Hobbs

New Mexico

By Joseph L. Henderson

Title Field Superintendent

U. S. GOVERNMENT PRINTING OFFICE 16—8437-5

Map ID 37

Form 9-330

Budget Bureau No. 42-R355.2.
Approval expires 12-31-52.

U. S. LAND OFFICE Las Cruces
SERIAL NUMBER LC 068051
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company Stanolind Oil and Gas Company Address Box 68 Hobbs, New Mexico

Lessor or Tract Ruth C. McPherson Field Wildcat State New Mexico

Well No. 1 Sec. 11 T. 18-S R. 27-E Meridian N M P M County Eddy

Location 1980 ft. [N.] of South line and 1980 ft. [W.] of East Line of Sec. 11, T-18-S, R-27-E Elevation 3593 (Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed

Date November 26, 1956 Title Production Foreman

The summary on this page is for the condition of the well at above date.

Commenced drilling 9-1, 1956 Finished drilling 11-5, 1956

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from to No. 4, from to

No. 2, from to No. 5, from to

No. 3, from to No. 6, from to

IMPORTANT WATER SANDS

No. 1, from to No. 3, from to

No. 2, from to No. 4, from to

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
13-3/8	48&36	8 Rd	H-40 Armco	563	Guide	None			Surface
9-5/8	32.3	8 Rd	H-40	1975	Guide	None			Intermediate

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/8	572	700 sx neat	Howco		
9-5/8	1790	250 sx 8% gel + 1#tuf plug per sk.	Howco		
5-1/2	Casing was not run in this well.				

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth set

Adapters—Material Size

SHOOTING RECORD

FOLD | MARK

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 0 feet to 7270 feet, and from ..... feet to ..... feet

Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet

DATES

..... , 19..... Put to producing Dry Hole , 19.....

The production for the first 24 hours was ..... barrels of fluid of which ..... % was oil; ..... % emulsion; ..... % water; and ..... % sediment. Gravity, °Bé. .....

If gas well, cu. ft. per 24 hours ..... Gallons gasoline per 1,000 cu. ft. of gas .....

Rock pressure, lbs. per sq. in. .....

EMPLOYEES

H. L. Gilbert , Driller Z. Carr , Driller

George Wheat , Driller Bob Minnick , Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	312	312	Red Bed
312	360	48	Anhy. & lime
360	482	122	Anhy.
482	539	57	Anhy. sand
539	630	91	Lime anhy.
630	835	205	Shale & Lime
835	1460	625	Lime Anhy.
1460	1679	219	Shale & Lime
1679	1726	47	Shale Anhy. Dolomite
1726	1828	102	Anhy. Shale Sand
1828	2118	290	Lime
2118	2696	578	Lime & Dolomite
2696	2790	94	Anhy. & Dolomite
2790	2947	157	Dolomite & Chert
2947	3026	79	Anhy. & Dolomite
3026	3434	408	Dolomite
3434	4154	720	Dolomite Anhy.
4154	4505	351	Dolomite & Chert
4505	4558	53	Dolomite
4558	4685	127	Sand & Dolomite
4685	5093	408	Dolomite
5093	5214	121	Dolomite & Chert
5214	5722	508	Dolomite & Shale
5722	5858	136	Dolomite & Chert
5858	6055	197	Dolomite
6055	6349	294	Dolomite & Lime

16—43094-2 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
6349	6502	153	Dolomite & Shale
6502	6631	129	Dolomite
6631	6850	219	Dolomite & Shale
6850	6911	61	Dolomite Lime Shale
6911	6932	21	Dolomite & Lime
6932	7066	134	Dolomite & Shale
7066	7074	8	Dolomite & Lime
7074	7270	196	Dolomite & Shale

Core #1 1750-1758 Rec. 8' light brown to tan fine crystallin lime and dolomite and very thin streak of gray shale and anhy. inclusion.

Core #2 1758-1780 Rec. 20', 1758-1775 limy dolomite w/streaks gray shale 1775-1778 brown sand w/good stain flourescent and porocity.

Core #3 2500-2512 Rec. 11' brown fine to medium crystallin dolomite w/large anhy. inclusions & vuggy to pin point porosity & poor to good scattered oil stain & odor.

Core #4 6723-6737 Rec. 10-1/2, 7' dark dense fine crystallin shaly dolomite and 3-1/2' sh micro x l N dolomite, No show.

DST #1 2455-2512 tool open 2 hrs. fair blow of air 1-1/2 hr. & died. Rec. 30' drl mud, no show oil, gas, or water. 3/4 hr. Final BHPSI 65#, Init. FBHP 55# Final FBHP 65#

DST #2 6264-6304 tool open 2-1/2 hrs. fair blow throughout test. Rec. 1350' of salty sulphur water, slightly gas cut. 30 min. initial BHSIP 2390, final 30 min. Initial flowing 60 PSIG. Final flowing 600 PSIG.

DST #3 6685-6739 tool open 2-1/2 hrs. Rec. 180' drl mud, 370' sulphur water, no show oil or gas. 20 min. Initial SIP 2665# Final 2120#. Initial flow 75# Final 315#.

DST #4 6915-6957 tool open 2 hrs. 5 min. Rec. 60' drlg mud and 180' sulphur water, no show oil or gas, 20 min. SIBHP 2750 Final SIBHP failed. Initial FBHP 60#

Form C-103
(Revised 3-55)

NEW MEXICO OIL CONSERVATION COMMISSION
MISCELLANEOUS REPORTS ON WELLS

HOBBS OFFICE OCC

(Submit to appropriate District Office as per Commission Rule 1106)

1957 JAN 31 PM 2:36

COMPANY Pan American Petroleum Corporation, Box 68, Hobbs, New Mexico
(Address)

LEASE Ruth C. McPherson WELL NO. 1 UNIT J S 11 T 18 R 27

DATE WORK PERFORMED _____ POOL Undesignated

This is a Report of: (Check appropriate block)

- [ ] Beginning Drilling Operations
- [ ] Plugging
- [ ] Results of Test of Casing Shut-off
- [ ] Remedial Work
- [x] Other Change in Company name

Detailed account of work done, nature and quantity of materials used and results obtained.

Change in operating name from "Stanolind Oil and Gas Company" to "Pan American Petroleum Corporation" effective February 1, 1957.

FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

Original Well Data:

DF Elev. _____ TD _____ PBD _____ Prod. Int. _____ Compl Date _____

Tbng. Dia _____ Tbng Depth _____ Oil String Dia _____ Oil String Depth _____

Perf Interval (s) _____

Open Hole Interval _____ Producing Formation (s) _____

RESULTS OF WORKOVER:	BEFORE	AFTER
Date of Test		
Oil Production, bbls. per day		
Gas Production, Mcf per day		
Water Production, bbls. per day		
Gas-Oil Ratio, cu. ft. per bbl.		
Gas Well Potential, Mcf per day		

Witnessed by _____ _____ (Company)

OIL CONSERVATION COMMISSION

Name W. L. Armstrong
Title
Date FEB 4 1957

I hereby certify that the information given above is true and complete to the best of my knowledge.

Name Ralph K. Henderson
Position Field Superintendent
Company Pan American Petroleum Corporation

copy to N. M. O. C. C. COPY

APPROVED
DEC 7 1959
CHARLES A. KRAUPP
ACTING DISTRICT ENGINEER

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office [redacted]
Lease No. [redacted]
Unit

RECEIVED
MAR 7 1962
O. C. C.
ARTESIA, OFFICE

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	X
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Ruth C. McPherson

December 2, 1959

Well No. 1 is located 1980 ft. from {S} line and 1980 ft. from {E} line of sec. 11

NW/4-SE/4, Sec. 11 (Qtr. Sec. and Sec. No.) T-18-S (Twp.) R-27-E (Range) NMPM (Meridian)

Wildcat (Field) Eddy (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 3593 ft. RDB

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JAN 29 1962
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

On 11-11-59 P X A operations were completed. Work done and plugs set as follows:

1. Cut and pulled 9 5/8" casing @ 960'.
2. Set 25 sx cement plug @ 960'; 15 sx cement in bottom of 13 3/8" casing @ 572'; 10 sx cement plug at surface. All intervals filled with heavy mud laden fluid.
3. Set P X A marker; restored ground to natural contour.

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DEC 7 1959
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be started.

Company Pan American Petroleum Corporation

Address Box 68

Hobbs, New Mexico

By [signature]

Title Area Superintendent

Form 9-331 C
(May 1963)

N. M. O. C. C. COPY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

Copy to SF

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL ☐ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ OTHER Re-Entry SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR: Bill J. Smith

3. ADDRESS OF OPERATOR: 1504 Stagecoach Dr., Arlington, Texas, 76013

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FS&EL Section 11, T-18-S, R-27-E
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.: NM-6850

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Ruth C. McPherson

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Artesia

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 11, T-18-S R-27-E

12. COUNTY OR PARISH: Eddy

13. STATE: New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 14 miles east of Artesia

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 660'

16. NO. OF ACRES IN LEASE: 40

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: none

19. PROPOSED DEPTH: 1800

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.):

22. APPROX. DATE WORK WILL START*: September 15, 1970

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17"	13 3/8#	N/A*	572'	700 sacks
11	9 5/8#	N/A*	1990	450 sacks

Propose to clean out plugs to about 1900', tie onto 9 5/8" casing stub with casing bowl and 32.3 # 9 5/8" casing, perforate indicated pay in Grayburg formation, stimulate as necessary and test.

* Information on file only.
Casing set when well originally drilled in 1956. 13 3/8" casing was not pulled. 9 5/8" casing cut at 960' and pulled.

RECEIVED SEP 3 1970 U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Bill J. Smith TITLE DATE 9-1-70

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED SEP 8 1970 R. L. BEEKMA ACTING DISTRICT ENGINEER

THIS APPROVAL IS RESCINDED IF OPERATIONS ARE NOT COMMENCED WITHIN 3 MONTHS. EXPIRES DEC 8 1970

RECEIVED SEP 9 1970 O. C. C. ARTESIA, OFFICE

See Instructions On Reverse Side

N MEXICO OIL CONSERVATION COMMISS

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
Bill J. Smith	Ruth C. McPherson	1

Unit Letter	Section	Township	Range	County
J	11	18-S	27-E	Eddy

Actual Footage Location of Well: 1980 feet from the South line and 1980 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3580	Grayburg	Artesia	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

RECEIVED

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

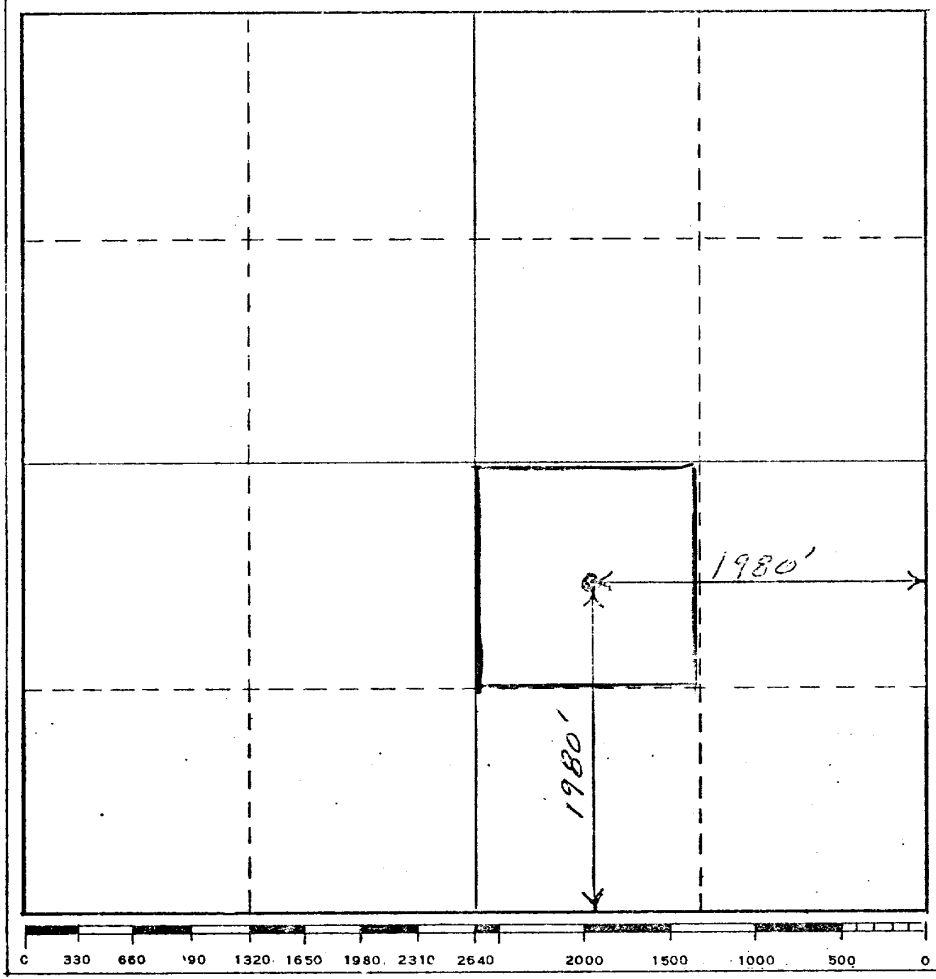
SEP 9 1970

☐ Yes ☐ No If answer is "yes," type of consolidation _____

O. C. C.
ARTESIA, OFFICE

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: Bill J. Smith

Position

Company

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: Refer to Original Plat

Registered Professional Engineer and/or Land Surveyor

Certificate No.

OWWO

COUNTY EDDY FIELD Artesia STATE NM MH 00870

OPR SMITH, BILL J. MAP

1 McPherson, Ruth C.

Sec 11, T-18-S, R-27-E CO-ORD

1980' FSL, 1980' FEL of Sec

CLASS OWDF EL 3592R

Re-Cmp 4-19-71

FORMATION	DATUM	FORMATION	DATUM

CSG & SX - TUBING
13 3/8" at 572' w/700 sx
9 5/8" at 1990' w/450 sx (Pulled)
4 1/2" at 4500'

LOGS EL GR RA IND HC A

TD 7270'; PBD 4500'

TEMPORARILY ABANDONED

CONT. PROP DEPTH 1800' TYPE WO

DATE

F.R. 9-15-70; Opr's Elev. 3580' GL
PD 1800' WO (Grayburg)
(Orig. Stanolind Oil & Gas #1 McPherson-Federal, P&A 11-7-56, OTD 7270')

9-22-70 TD 7270'; PBD 4500'; Prep PB to Grayburg
Cleaned Out to 4500'
Ran 4 1/2" Casing
Perf (Yeso) 4070-4100'
Acid (4070-4100') 3000 gals
Swbd blk sul wtr (4070-4100')

9-28-70 TD 7270'; PBD 4500'; SI
10-26-70 TD 7270'; PBD 4500'; SI
1-8-71 TD 7270'; PBD 4500'; SI

2-22-71 TD 7270'; PBD 4500'; SI
4-12-71 TD 7270'; PBD 4500'; SI
4-19-71 TD 7270'; PBD 4500'; TEMPORARILY ABANDONED
4-22-71 COMPLETION REPORTED

OWWO

COUNTY EDDY FIELD Artesia STATE NM MH 00870

OPR SMITH, BILL J. MAP

1 McPherson, Ruth C.

Sec 11, T-18-S, R-27-E CO-ORD

1980' FSL, 1980' FEL of Sec

CLASS OWDF EL 3592Z

Re-Cmp 4-19-71

FORMATION	DATUM	FORMATION	DATUM
TD 7270'; PBD 4500'			

CSG & SX - TUBING
13 3/8" at 572' w/700 sx
9 5/8" at 1990' w/450 sx (Pulled)
4 1/2" at 4500'

LOGS EL GR RA IND HC A

TEMPORARILY ABANDONED

CONT. PROP DEPTH 1800' TYPE WO

DATE

F.R. 9-15-70; Opr's Elev. 3580' GL
PD 1800' WO (Grayburg)
(Orig. Stanolind Oil & Gas #1 McPherson-Federal, P&A 11-7-56, OTD 7270')

9-22-70 TD 7270'; PBD 4500'; Prep PB to Grayburg
Cleaned Out to 4500'
Ran 4 1/2" Casing
Perf (Yeso) 4070-4100'
Acid (4070-4100') 3000 gals
Swbd blk sul wtr (4070-4100')

9-28-70 TD 7270'; PBD 4500'; SI
10-26-70 TD 7270'; PBD 4500'; SI
1-8-71 TD 7270'; PBD 4500'; SI

2-22-71 TD 7270'; PBD 4500'; SI
4-12-71 TD 7270'; PBD 4500'; SI
4-19-71 TD 7270'; PBD 4500'; TEMPORARILY ABANDONED
4-22-71 COMPLETION REPORTED

N. M. O. C. C. COPY

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER DRY-HOLE RE-ENTRY

2. NAME OF OPERATOR: Amoco Production Company

3. ADDRESS OF OPERATOR: BOX 68, HOBBS, N. M. 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface: 1980' FSL x 1980' FEL Sec. 11 (Unit J, NW/4 SE/4)

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3593' D.F.

5. LEASE DESIGNATION AND SERIAL NO.: LC-068051

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: SMITH McPHERSON

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: WILDCAT-

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27 NMPM

12. COUNTY OR PARISH: EDDY

13. STATE: N.M.

RECEIVED JUL 13 1973 U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☒
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)							

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Physical abandonment of well concluded 6-6-73.
Plugged and abandoned as follows:
Filled hole w/ mud. (PBD-4365')
Spotted 30 sx cement plug 4119'-3735' (BLIN. PERS. 4100'-4070')
Shot & pulled 4½" csg. from 2990'.
Spotted 30 Sx cement plug 3040'-2900' (in + out of 4½" stub)
" 40 Sx " " 2040'-1922'
No 9⅝" Casing found in Hole.
Spotted 50 Sx. cement plug 1010'-910'
" 60 " " " 602'-502' (13⅜" CSA 572')
" 10 " " " @ surface & erected P&A marker.
Location shall be cleaned & Levelled.

18. I hereby certify that the foregoing is true and correct

SIGNED [illegible] TITLE AREA ENGINEER DATE 6-15-73

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED JUL 13 1973 R. L. BEEKMAN ACTING DISTRICT ENGINEER

04 4- USGS-ARTESIA
1- DIV
1- SUSA
1- IRY
2- ARCO-MIDLAND

*See Instructions on Reverse Side

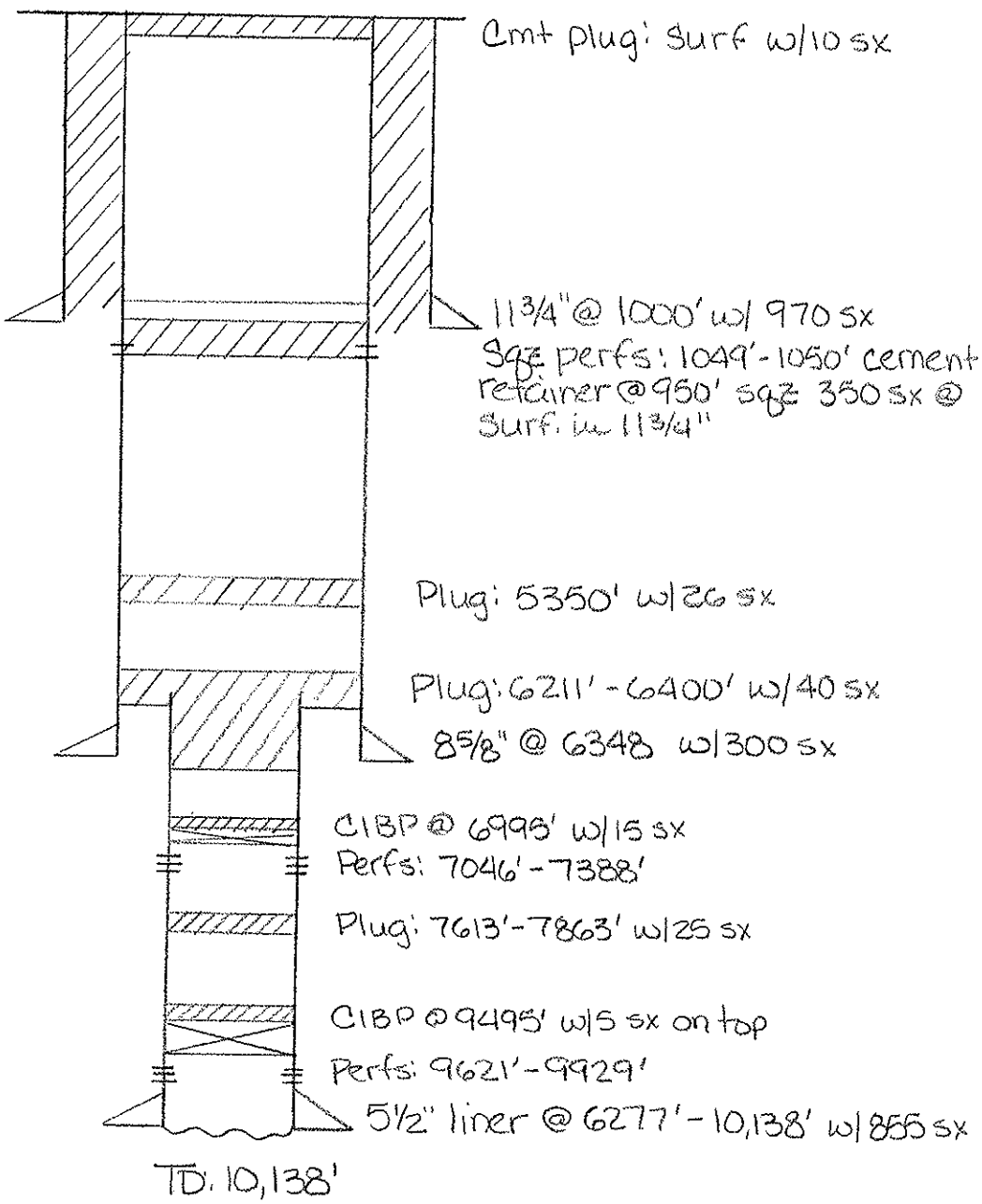
SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 40
Artificial Penetration Review

OPERATOR Pre-Ongard Well Op.
LEASE Pre-Ongard
WELL NUMBER 1
DRILLED NA
PLUGGED NA

STATUS Plugged
LOCATION Sec. 11 -T18S-R27E
MUD FILLED BOREHOLE NA
TOP OF INJECTION ZONE 7070'
API NO. 30-015- 20510

REMARKS: Calculated Top of Cement behind 5½" liner @ 6277'



Case 4663 2-16-72
Order R-4264 2-28-72

IT IS THEREFORE ORDERED:

(1) That an unorthodox gas well location is hereby approved for the Amoco Production Company's Malco "S" Federal Well No. 1 in an undesignated Morrow-Pennsylvanian pool at a point 1650 feet from the North line and 1653 feet from the West line of Section 11, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico, as an exception to Rule 104 of the Commission Rules and Regulations.

PLC # 43
4-6-72

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
AMOCO PRODUCTION COMPANY	MALCO "A" FEDERAL	3

Unit Letter	Section	Township	Range	County
F	11	18 SOUTH	27 EAST	EDDY

Actual Footage Location of Well: 1650 feet from the NORTH line and 1653 feet from the WEST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
-	Miss.	Wildcat	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

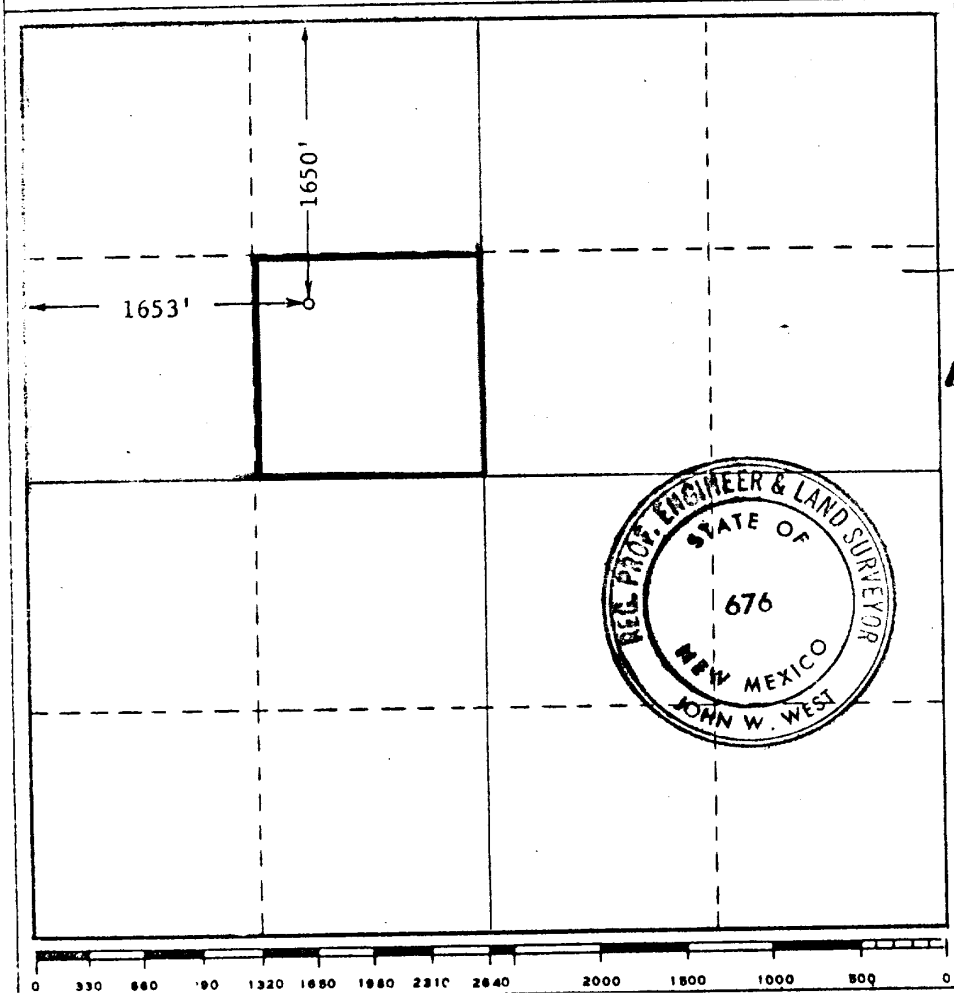
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position
AREA SUPERINTENDENT

Company
Amoco Production Company

Date
SEP 27 1971

RECEIVED
OCT - 7 1971
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
SEPTEMBER 16, 1971

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. 676

RECEIVED

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

DEC 29 1972

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

API 30-015-20510

Operator	Lease	
AMOCO PRODUCTION COMPANY	MOLCO "S" FEDERAL	ARTESIA, OFFICE #1

Unit Letter	Section	Township	Range	County
F	11	18 SOUTH	27 EAST	EDDY

Actual Footage Location of Well:
1650 feet from the NORTH line and 1653 feet from the WEST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3587 RDB	MORROW-(PENN)	SCOGGIN DRAW-MORROW	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

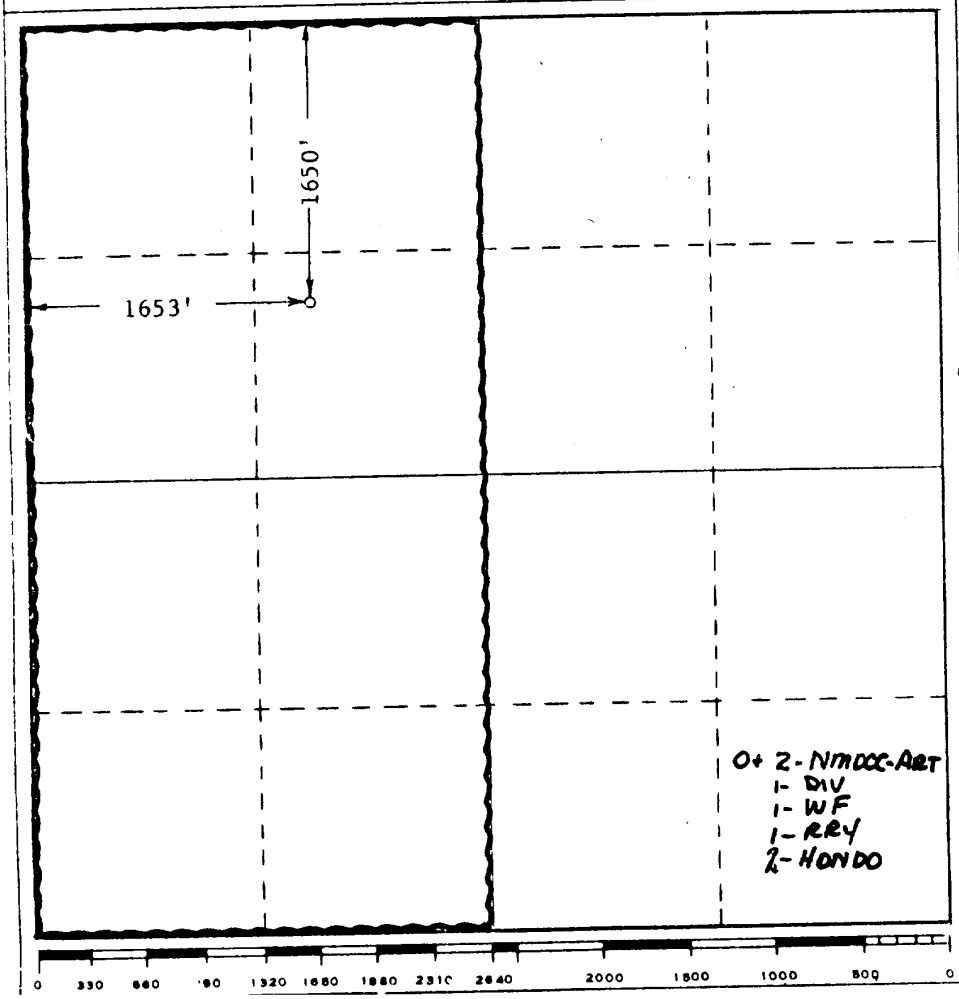
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: [illegible]

Position: AREA ~~SUPERINTENDENT~~ Engineer

Company: Amoco Production Company

Date: 12-28-72

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: SEPTEMBER 16, 1971

Registered Professional Engineer and/or Land Surveyor: John W. West

Certificate No. 676

N. M. O. C. C. COPY

Form 9-331 C
(May 1963)

SUBMIT IN T LICATE*
(Other instru ns on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-20510

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED
OCT 8 1971
O. C. C.

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR: Amoco Production Company

3. ADDRESS OF OPERATOR: BOX 68, HOBBS, N. M. 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1650' FNL x 1653' FWL Sec. 11 (F, SE/4 NW/4)
At proposed prod. zone:

5. LEASE DESIGNATION AND SERIAL NO.: LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: MALCO A FEDERAL

9. WELL NO.: 3

10. FIELD AND POOL, OR WILDCAT: WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27 NMPM

12. COUNTY OR PARISH: EDDY

13. STATE: NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*:

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any):

16. NO. OF ACRES IN LEASE:

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.:

19. PROPOSED DEPTH: 10,500'

20. ROTARY OR CABLE TOOLS: ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.):

22. APPROX. DATE WORK WILL START*:

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	11 3/4"	42-47#	1000'	Circ
11 "	8 5/8"	24-36#	6200'	Fill 600' above Abo
7 7/8"	5 1/2" LINER	14-17#	6200-TD	Squeeze behind liner.

After drilling well logs will be run and evaluations made, perforating and/or stimulating as necessary in attempting commercial production.

RECEIVED
OCT - 7 1971
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED: TITLE: AREA SUPERINTENDENT DATE: 10-6-71

(This space for Federal or State office use)

PERMIT NO.: APPROVAL DATE:

APPROVED BY: TITLE: DATE:

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
OCT - 7 1971
R. L. BEEKMAN
ACTING DISTRICT ENGINEER

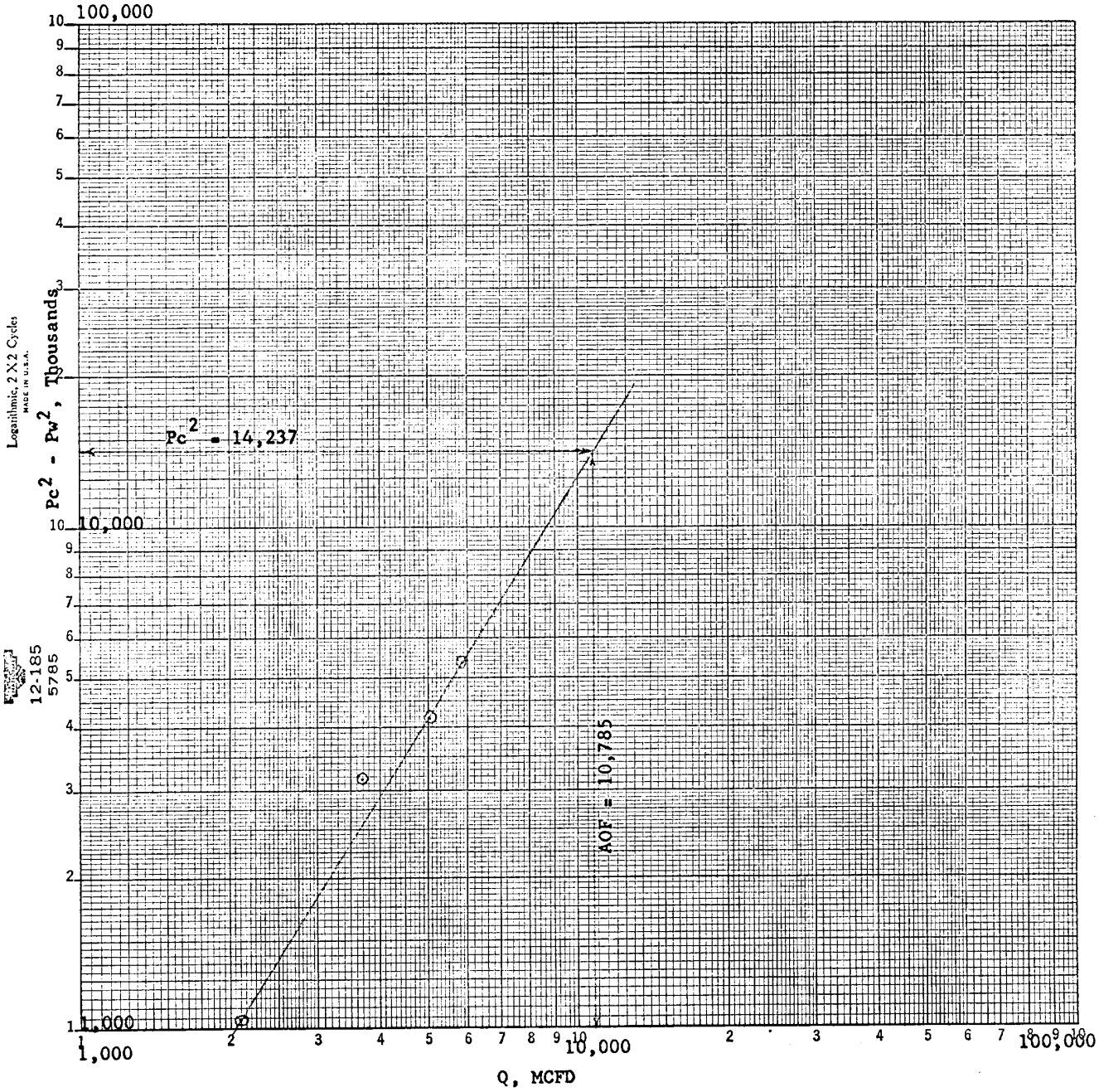
THIS APPROVAL IS RESCINDED IF OPERATIONS ARE NOT COMMENCED WITHIN 3 MONTHS.

EXPIRES JAN - 7 1972

Ok 4 - USGS - ART
1 - AC Jr
1 - SUSP
1 - RRY
1 - Arco - Roswell
Doug Kurzik

*See Instructions On Reverse Side

Amoco Production Company
Malco "S" Federal No. 3
F-11-18S-27E
12/22/71



NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
JAN 3 1972
O. C. C.
ARTESIA, OFFICE

Type Test: [x] Initial [/] Annual [ ] Special				Test Date: 12/22/71	
Company: Amoco Production Company		Connection: None			
Pool: Wildcat		Formation: Morrow Penn			Unit: API No. 30-015-20510
Completion Date: 12/18/71	Total Depth: 10,168	Plug Back TD: 10,000		Elevation: 3587 KDB	Farm or Lease Name: Malco "S" Federal #3
Csg. Size: Liner 5-1/2"	Wt.: 17#	d: 4.892	Set At: 6277' - 10,138	Perforations: From 9621 To 9929	Well No.: X #31
Tbg. Size: 2-3/8"	Wt.: 4.7	d: 1.995	Set At: 9504	Perforations: From Open End To	Unit: F Sec.: 11 Twp.: 18S Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single				Packer Set At: 9491'	County: Eddy
Producing Thru: 2-3/8" Tbg	Reservoir Temp. °F: 145@ 9775	Mean Annual Temp. °F: 60		Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9504	9504	0.630	0.38	0.31	0	-	6"	Flange

NO.	FLOW DATA: Prover Line Size x Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2862		Pkr	-	40 hrs
1.	6.065 x 2.500	565	5.3	110	2689	60	Pkr	-	1 hr
2.	6.065 x 2.500	560	16.0	97	2453	60	Pkr	-	1 hr
3.	6.065 x 2.500	590	27.5	87	2220	60	Pkr	-	1 hr
4.	6.065 x 2.500	600	36.0	81	2035	60	Pkr	-	1 hr
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	30.31	55.34	578.2	0.9551	1.260	1.038	2.096
2	30.31	95.76	573.2	0.9662	1.260	1.041	3.678
3	30.31	128.79	603.2	0.9750	1.260	1.048	5.026
4.	30.31	148.56	613.2	0.9804	1.260	1.049	5.836
5.							

NO.	P_t	Temp. °R	T_r	Z
1	0.86	570	1.57	0.928
2	0.85	557	1.53	0.922
3.	0.90	547	1.50	0.911
4.	0.91	541	1.49	0.908
5				

Gas Liquid Hydrocarbon Ratio 74,136 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 54.0 Deg.
Specific Gravity Separator Gas 0.630 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.670
Critical Pressure 673 P.S.I.A. 670 P.S.I.A.
Critical Temperature 364 R 381 R

*P_c 3773.2 P_c^2 14,237

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3632.8	13,197	1,040
2		3330.2	11,090	3,147
3		3173.2	10,069	4,168
4		2981.1	8,887	5,350
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.661$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.848$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^{n'} = 10.785$

Absolute Open Flow 10,785 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n 0.626

Remarks: * Pc measured with bottom hole pressure recorder

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Al Klaar	Ed Snook	Ed Snook

(Form C-123)
(Revised 7/1/52)

Copy to S F

REQUEST FOR THE EXTENSION OF AN EXISTING POOL

OR

THE CREATION OF A NEW POOL

TO: The Oil Conservation Commission
State of New Mexico

Date 2-10-, 19 72

The Amoco Production Company BOX 68, HOBBS, N. M. 88240 (Name of Operator) MALCO "S" Federal (Name of Lease)

1 (Well No.) Located 1650 feet from the NORTH line and 1653 feet

from the WEST line of 11 (Section) 18-S (Township) 27-E (Range)

is outside the boundaries of any pool producing from the same formation. On the basis of the information submitted herewith on form C-105, we hereby request that the

pool be extended to include the following described area

or that a new pool be created to include the following described area W/2 SEC. 11, T-18-S, R-27-E

Suggested name: SCOGGIN DRAW-PENN

Amoco Production Company
Operator

Name of Producing Formation: (MORROW)-PENN

AREA SUPERINTENDENT
Representative

RECEIVED
FEB 14 1972
O. C. C.
ARTESIA, OFFICE

DJI NMOCC-ART
1- DIV
1- WJ
1- HONDO

R-4291
Scoggin Draw Morrow
5-1-72

DONE at Santa Fe, New Mexico, on this 6th day of April, 1972.

A. L. PORTER, Jr.
Secretary-Director

ALP/DSN/dr

cc: Oil Conservation Commission - Artesia
Oil & Gas Engineering Committee - Hobbs
United States Geological Survey - Roswell

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

RECEIVED
APR 7 1972
O. C. C.
ARTESIA, OFFICE

April 6, 1972

Amoco Production Company
P. O. Box 68
Hobbs, New Mexico 88240

Attention: Mr. V. E. Staley

COMMINGLING ORDER PLC-43

Gentlemen:

The above-named company is hereby authorized to commingle Empire Abo oil and undesignated Morrow gas pool distillate pool production from the following leases:

Lease Name	Acreage Description
Malco H Federal R/A A	NE/4 SE/4 Sec. 3-18-27
Malco D Federal R/A A	N/2 NE/4 Sec. 10-18-27
Malco D Federal R/A B	S/2 NE/4 Sec. 10-18-27
Malco E Federal R/A A	SE/4 SE/4 Sec. 3-18-27
Malco E Federal R/A B	SW/4 SE/4 Sec. 3-18-27
Malco A Federal	E/2 NW/4 Sec. 11-18-27
Malco B Federal	W/2 NW/4 Sec. 11-18-27
Malco C Federal	W/2 NE/4 Sec. 11-18-27
Malco J Federal	E/2 NE/4 Sec. 11-18-27

Production shall be allocated by separately metering the oil production from each of the above leases and separately metering the distillate production from the Malco "S" Federal Well No. 1 prior to commingling.

This installation shall be installed and operated in accordance with the applicable provisions of Rule 309-B of the Commission Rules and Regulations and the Commission "Manual for the Installation and Operation of Commingling Facilities." It is the responsibility of the producer to notify the transporter of this commingling authority.

Commission Order No. R-1399, which authorized commingling of all of the above production except the Morrow distillate, is hereby put in abeyance.

NEW MEXICO OIL CONSERVATION COMMISSION

Artesia, New Mexico

May 9, 1972

Amoco Production Company
P. O. Box 68
Hobbs, New Mexico 88240

Re: Wells placed in pools

Gentlemen:

As the result of Commission Order R-4291 the following described well (~~s~~) (has-~~have~~) been placed in the pool (~~s~~) shown below. This change in nomenclature has been made in our files. Please change your records to reflect the proper pool name. All subsequent reports must show this nomenclature until further notice.

Scoggin Draw Morrow
Malco "S" Federal #1-F, 11-18-27

Transporters are advised, by copy of this letter, to change their records to reflect the pool name as established by this order.

Very truly yours,

OIL CONSERVATION COMMISSION

Dist.
Orig. Operator
cc: Each transporter

Amoco Production Company
Post Office Box 68
Hobbs, New Mexico, 88240

March 19, 1973

File: VES-86-680 x WF

Re: Back Pressure Test
Amoco's Malco "S" Federal No. 1
F-11-18-27
Eddy County, New Mexico

New Mexico Oil Conservation Commission
P. O. Drawer DD
Artesia, New Mexico, 88210

Gentlemen:

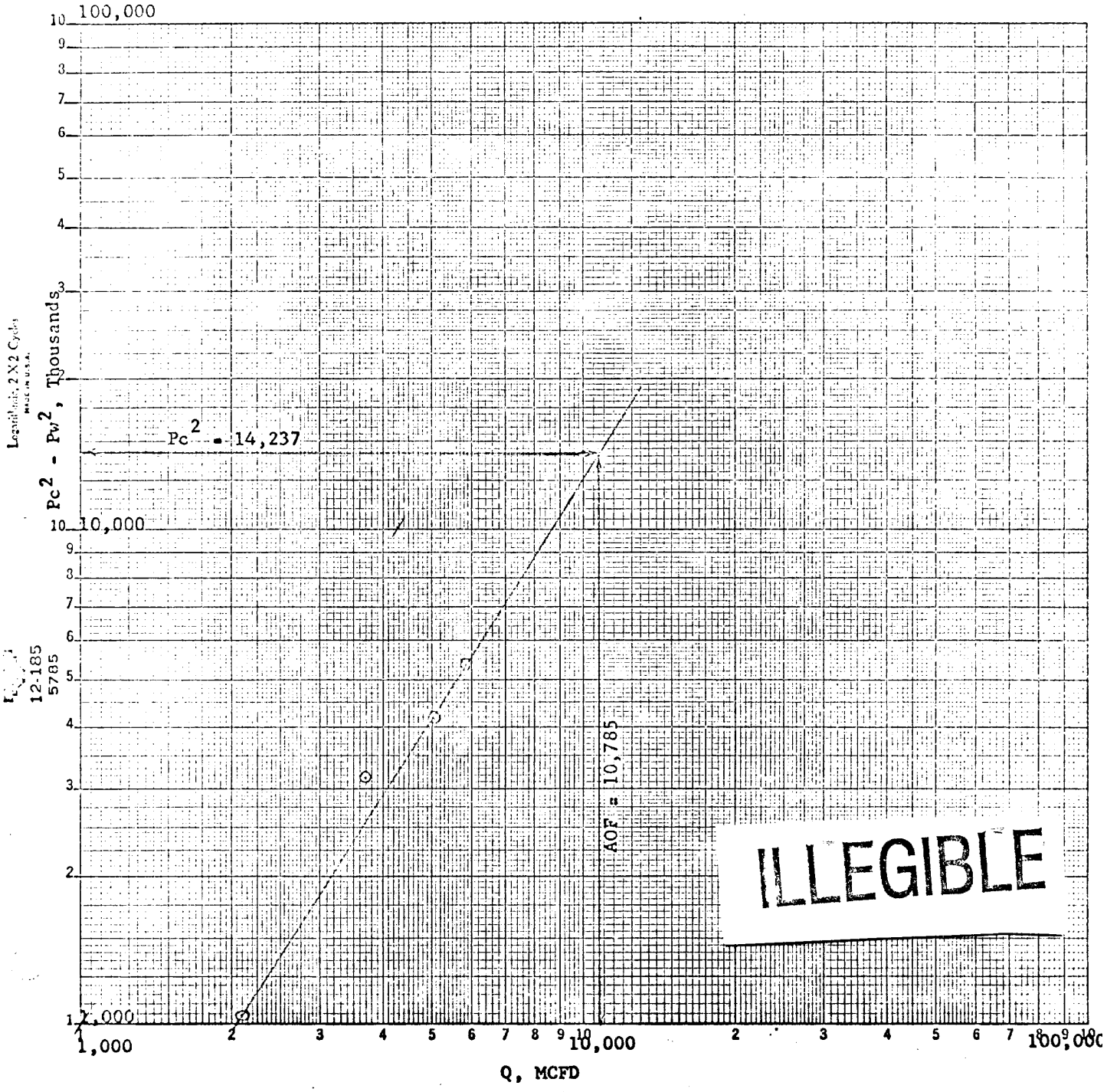
Attached herewith is a One Point Back Pressure Test on Amoco's Malco "S" Federal No. 1, F-11-18-27, Eddy County, New Mexico. Due to a drastic decline in reservoir pressure and low producing rates, it was not feasible to take a Four Point test on this well and the One Point test submitted is based on the maximum flow rate at existing sales line pressures and the slope of the original Four Point test submitted December 28, 1971. As can be seen from the reservoir pressure and cumulative production of 104 MMCF to the last test period, the well is on a rapid decline. We trust these data will fill your requirements for a back pressure test.

Yours very truly,

V. E. STALEY
Area Superintendent

Attachments

moco Production Company
alco "S" Federal No. 1
F-11-18S-27E
12/22/71



EW MEXICO OIL CONSERVATION CC SSION

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

MAR 20 1973

O. C. C.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special		Test Date: 12/22/71	
Company: Amoco Production Company	Connection: None		
Pool: Wildcat	Formation: Morrow Penn		Unit: API No. 30-015-20510
Completion Date: 12/13/71	Total Depth: 10,168	Plug Back TD: 10,000	Elevation: 3587 KDB
Farm or Lease Name: Malco "S" Federal			
Cas. Size: Liner 5-1/2"	Wt.: 17#	d: 4.892	Set At: 5277' 10,133
Perforations: From 9621 To 9929	Well No.: 1		
Tbg. Size: 2-3/8"	Wt.: 4.7	d: 1.995	Set At: 9504
Perforations: From Open End To	Unit: F	Sec.: 11	Twp.: 18S	Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 9491'	County: Eddy	
Producing Thru: 2-3/8" Tbg.	Reservoir Temp. °F: 145 @ 9775	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9504	9504	0.630	0.38	0.31	0	-	6"	Flange

NO.	FLOW DATA: Prover Line Size x Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2862		Pkr	-	40 hrs
1.	6.065 x 2.500	565	5.3	110	2689	60	Pkr	-	1 hr
2.	6.065 x 2.500	560	16.0	97	2453	60	Pkr	-	1 hr
3.	6.065 x 2.500	590	27.5	87	2220	60	Pkr	-	1 hr
4.	6.065 x 2.500	600	36.0	81	2035	60	Pkr	-	1 hr
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
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3	38.31	128.79	603.2	0.9750	1.260	1.048	5.026
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5							

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2	0.35	557	1.53	0.922
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5				

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A.P.I. Gravity of Liquid Hydrocarbons 54.0 Deg.
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Specific Gravity Flowing Fluid XXXXX 0.670
Critical Pressure 673 P.S.I.A. 670 P.S.I.A.
Critical Temperature 364 R 381 R

P_c 3773.2 P_c^2 14,237

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2		3330.2	11,090	3,147
3		3173.2	10,069	4,168
4		2981.1	8,887	5,350
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(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.661$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.848$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 10,785$

Absolute Open Flow 10,785 Mcfd @ 15.025 | Angle of Slope θ | Slope, n 0.629

Remarks: Was measured with bottom hole pressure recorder

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Al Klear	Ed Snook	Ed Snook

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DISTRIBUTION			
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FILE		/	✓
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TRANSPORTER	OIL	/	
	GAS	/	
OPERATOR		/	
PRORATION OFFICE			

NEW MEXICO OIL CONSERVATION COMMISSION

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

RECEIVED
SEP 13 1976
O. C. C.
ARTESIA, OFFICE

I.

Operator: AMOCO PRODUCTION COMPANY ✓

Address: P.O. DRAWER A, LEVELLAND, TEXAS 79336

Reason(s) for filing *(Check proper box)*

- New Well ☐
- Recompletion ☐
- Change in Ownership ☐
- Change in Transporter of: Oil ☐ Dry Gas ☒ Casinghead Gas ☐ Condensate ☐

Other *(Please explain)* Eff 8-1-76
FROM: AMOCO PRODUCTION COMPANY
TO: GAS COMPANY of NEW MEXICO

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
MALCO "S" FEDERAL	1	SCOGGIN DRAW-MORROW Gas	State, Federal or Fee FEDERAL	LC-067858

Location: Unit Letter F ; 1650 Feet From The NORTH Line and 1653 Feet From The WEST

Line of Section 11 Township 18-S Range 27-E , NMPM, EDDY County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☐ or Condensate ☒: AMOCO PRODUCTION COMPANY - TRUCKS

Address *(Give address to which approved copy of this form is to be sent)*: Box 1183 · HOUSTON, TEXAS 77001

Name of Authorized Transporter of Casinghead Gas ☐ or Dry Gas ☐: GAS COMPANY OF NEW MEXICO

Address *(Give address to which approved copy of this form is to be sent)*: FIRST INTERNATIONAL Bldg. SUITE 1800 DALLAS, TX 75270

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	F	11	18	27	YES	12-27-72

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
Elevations *(DF, RKB, RT, GR, etc.)*	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
Perforations			Depth Casing Shoe

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method *(Flow, pump, gas lift, etc.)*	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method *(pitot, back pr.)*	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION COMMISSION

APPROVED SEP 14 1976, 19 _____

BY W. A. Gressett

TITLE SUPERVISOR, DISTRICT II

0+4-NMOCC-ART	Ray W. Cox (Signature)
1-Div	Administrative Assistant (Title)
1-JMG	
1-Hondo	9-3-76 (Date)
1-Susp	
1-RL	

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

NO. OF COPIES RECEIVED		5	
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SANTA FE		1	
FILE		1	✓
U.S.G.S.			
LAND OFFICE			
TRANSPORTER	OIL	1	
	GAS	1	
OPERATOR		1	
PRORATION OFFICE			

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

RECEIVED
JAN 28 1977
O. C. C.
ARTESIA, OFFICE

Operator
AMOCO PRODUCTION COMPANY

Address
P.O. Drawer A, Levelland, Texas 79336

Reason(s) for filing *(Check proper box)*
New Well ☐
Recompletion ☐
Change in Ownership ☐
Change in Transporter of:
Oil ☐ Dry Gas ☒
Casinghead Gas ☐ Condensate ☐

Other *(Please explain)* Eff. 8-1-76
From: Gas Company of New Mexico
To: Amoco Produciton Company

If change of ownership give name and address of previous owner _____

DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Malco "S" Federal	1	Scoggin Draw-Morrow	State, Federal or Fee Federal	LC-067858

Location
Unit Letter F ; 1650 Feet From The North Line and 1653 Feet From The West

Line of Section 11 Township 18-S Range 27-E , NMPM, Eddy County

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☐ or Condensate ☒
Amoco Production Company - Trucks
Address *(Give address to which approved copy of this form is to be sent)*
Box 1183, Houston, Texas 77001

Name of Authorized Transporter of Casinghead Gas ☐ or Dry Gas ☒
Amoco Production Company
Address *(Give address to which approved copy of this form is to be sent)*
P.O. Drawer A, Levelland, Texas 79336

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	F	11	18	27	Yes	12-27-72

If this production is commingled with that from any other lease or pool, give commingling order number: _____

COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
Elevations *(DF, RKB, RT, GR, etc.)*	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
Perforations			Depth Casing Shoe

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

TEST DATA AND REQUEST FOR ALLOWABLE
(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method *(Flow, pump, gas lift, etc.)*	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

Posted
ID. 3
Change 67
2-4-77

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method *(pitot, back pr.)*	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION COMMISSION

APPROVED JAN 31 1977, 19 _____

BY W. A. Gressett

TITLE _____

Ray W Cox
(Signature)

Administrative Assistant
(Title)

1-26-77
(Date)

O&4 NMOCC-Art
1-Div
1-JMG
1-Hondo
1-Susp
1-RC

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Amoco Production Company

3. ADDRESS OF OPERATOR
P. O. Box 68, Hobbs, NM 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1650' FNL X 1653' FWL, Unit F
AT TOP PROD. INTERVAL: Sec. 11, T-18-S, R-27-E
AT TOTAL DEPTH:

5. LEASE
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Malco "S" Federal

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Scoggin Draw - Morrow Gas

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-18-27

12. COUNTY OR PARISH: Eddy
13. STATE: NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
3587' RDB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☒	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

RECEIVED DEC 24 1981 OIL & GAS U.S. GEOLOGICAL SURVEY ROSWELL, NEW MEXICO

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Propose to acidize to increase production as follows: Install Tree Saver. Acidize with 8000 gal. 7-1/2% HCL NEFE acid staged with 150 ball sealers at a rate of 3-5 BPM as follows: (a) Run gamma ray-temp base log; (b) Pump 2000 gal. of acid; (c) inject 25 ball sealers; (d) Pump 1000 gall of acid (e) Repeat (c) and (d) until all acid is pumped; (f) Flush with 37 bbl. of treated 2% KCL water; (g) Run after job gamma ray-temp. treatment evaluation log; and (h) Swab back to recover load. Place well back on production.

0+4- USGS, A 1-Hou 1-Susp 1-CLF

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Cathy L. Forman TITLE Ast. Adm. Analyst DATE 12-21-81

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

APPROVED
DEC 28 1981
for JAMES A. GILLHAM
DISTRICT SUPERVISOR

*See Instructions on Reverse Side

NM OIL CON COMMISSION
Drawer DD
Artesia, NM 88210

c/SF

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
DEC 9 1982
OCD
ARTESIA, OFFICE

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Amoco Production Company

3. ADDRESS OF OPERATOR
P. O. Box 68, Hobbs, NM 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1650' FNL X 1653' FWL, Unit F
AT TOP PROD. INTERVAL: Sec. 11, T-18-S, R-27-E
AT TOTAL DEPTH:

5. LEASE
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Malco "S" Federal

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Scoggin Draw Morrow Gas

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-18-27

12. COUNTY OR PARISH
Eddy

13. STATE
NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
3587' RDB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☒	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

RECEIVED
DEC 3 1982
OIL & GAS
MINERALS MGMT. SERVICE
ROSWELL, NEW MEXICO

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Propose to fracture stimulate Morrow interval 9621'-9929' (non-continuous) as follows: Pull tubing and packer. Set a packer at apx. 9520'. Fracture stimulate with 20000 gal 40# gelled 2% KCl water commingled with 10000 gal CO2 carrying 20500# 20/40 sand. Flush with 3000 gal 2% KCl brine water and 1000 gal CO2. Flow and kick off well. If well won't flow, pull packer and run 3 joints tubing as tailpipe with 1.81" profile nipple 1 joint off bottom, landing tubing at apx. 9530'. Set a packer in 5½" liner at apx. 9430'. Run on-off tool with 1.875" profile nipple in seal mandrel. Run 2-3/8" tubing to surface and hydro test tubing. Flow test and return well to production.

0+4-MMS,A 1-HOU 1-SUSP 1-CLF

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Cathy L. Forman TITLE Ast. Adm. Analyst DATE 11-30-82

(This space for Federal or State office use)

APPROVED BY (Orig. Sgd.) PETER W. CHESTER TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
DEC 8 1982
FOR
JAMES A. GILLHAM
DISTRICT SUPERVISOR

*See Instructions on Reverse Side

C/SF

RECEIVED BY
JAN 11 1985
O. C. D.
ARTESIA, OFFICE

Form 3160-3
(November 1983)
(Formerly 9-331C)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL ☐ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER Recomplete SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR: Amoco Production Company ✓

3. ADDRESS OF OPERATOR: P.O. Box 68, Hobbs NM 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1650' FNL x 1653' FWL
At proposed prod. zone: (SE/4 NW/4 Unit F)

5. LEASE DESIGNATION AND SERIAL NO.: LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Malco S' Federal

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Chalk Bluff Wolfcamp

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27

12. COUNTY OR PARISH: Eddy

13. STATE: NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*:

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any):

16. NO. OF ACRES IN LEASE:

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.:

19. PROPOSED DEPTH: 7610'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3587 RDB

22. APPROX. DATE WORK WILL START*:

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15"	11 3/4"	47#	1000'	570 sks
11"	8 5/8"	32#	6348'	300 sks
7 7/8"	5 1/2" liner	17#	6277-10138'	855 sks

Propose to abandon the Morrow and recomplete to the Wolfcamp as follows:
1) POH with production equipment
2) RIH and set CIBP at 9500' and cap with 35' (5 sks) class 'H' neat cmt. Top of Morrow is at 9490'.
3) Spot a 250' (25 sx) class 'H' neat plug from 7860-7610. x Place mud between plugs
4) Run CBL from 7500-6500'.
5) If there is not a good cmt. bond between 7000'-7400' a supplemental procedure to

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED Gary C. Clark TITLE Asst. Admin. Analyst DATE 1-7-84

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY L Mark Hedley Acting TITLE DATE 1-9-85

CONDITIONS OF APPROVAL, IF ANY:
0+5 BLM, C 1-JRB 1-FJN 1-GCC 2-NMOCD, A

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

place cmt. behind pipe will be issued.

(6) Perforate Wolfcamp intervals 7046-62, 7090-7100, and 7382-88 w/4 DPJSPF using a 3 1/8" gun.

(7) RIH with RBP, tbg, and pkr. Set RBP at 7450', pkr. at 7280'.

(8) Swab and flow test well

(9) Stimulate Wolfcamp 7382-88' with 1000 gals 15% NEFE HCl gelled acid w/add. and 1000 gals non gelled 15% NEFE HCl w/add. Flush with 30 bbls fresh water.

(10) Swab and flow test well

(11) Release pkr, lower and latch onto RBP. Pull up RBP to 7200' and spot 10' sand on top. Set pkr at 6850'.

(12) Swab and flow test gross interval 7046'-7100'.

(13) Stimulate Wolfcamp 7046-62' and 7090-7100' as follows:

* Tag all acid w/RA material

a) Run before treatment GR Temp survey 7170'-6800'

b) Pump 4000 gals 15% NEFE HCl gelled acid w/add in 2 equal stages

c) Pump 1000 gals 15% NEFE HCl acid w/add

d) flush acid with 29 bbls fresh water

e) Run after treatment survey 7170'-6800'

(14) Swab and flow test well

(15) Release pkr and POH with RBP, pkr, and tbg.

(16) RIH with 2 3/8" tbg with seating nipple on bottom. Land tbg at 7450' and anchor at 7350'

(17) Run rods and pump and return well to production.

W MEXICO OIL CONSERVATION COMMI ON

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
Amoco Production Company	Malco "S" Federal	1

Unit Letter	Section	Township	Range	County
F	11	18-S	27-E	Eddy

Actual Footage Location of Well: 1650 feet from the North line and 1653 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3587 RDB	Wolfcamp	Chalk Bluff Wolfcamp	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

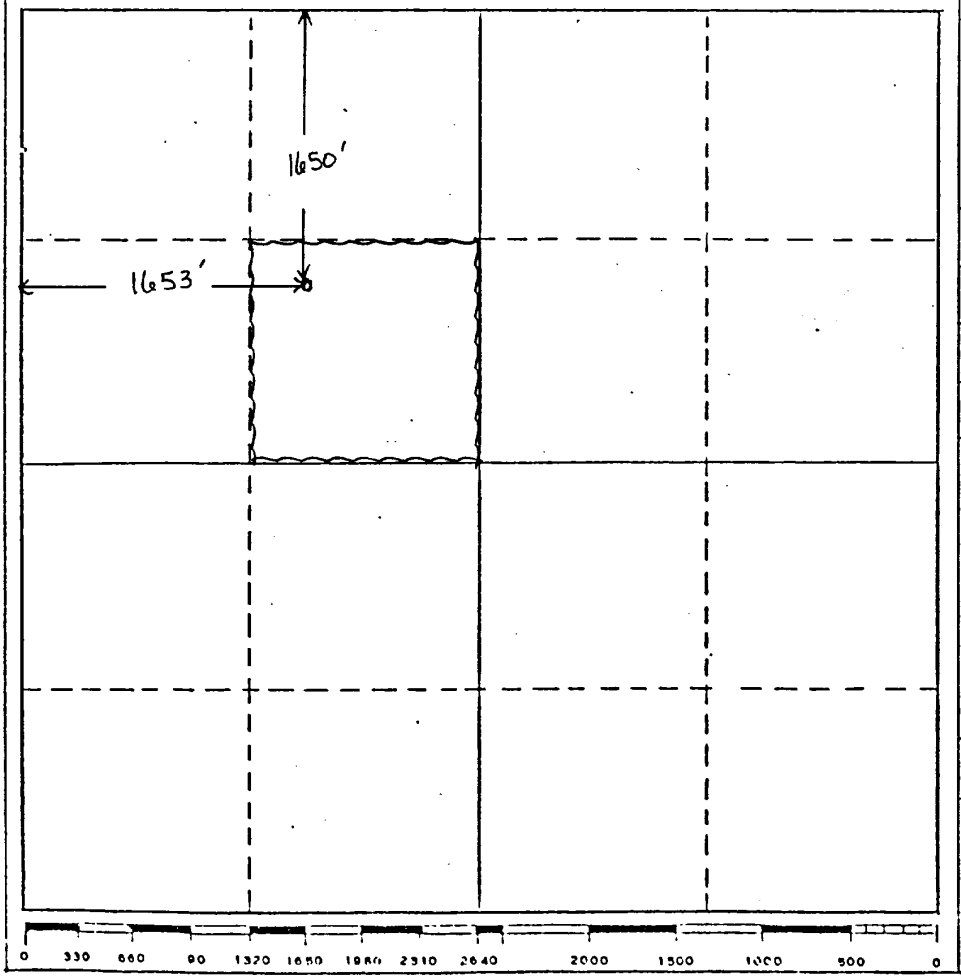
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: Gary C. Clark

Position: Asst. Admin. Analyst

Company: Amoco Production Company

Date: 1-7-85

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

RECEIVED BY
MAR 1 1985
C. C. D.
ARTESIA, OFFICE

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	✓
FILE	✓
U.S.G.S.	
LAND OFFICE	
TRANSPORTER OIL	✓
TRANSPORTER GAS	
OPERATOR	✓
PRORATION OFFICE	

Form C-104
Revised 10-01-78
Format 06-01-83
Page 1

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator: Amoco Production Company ✓

Address: P.O. Box 68 Hobbs NM 88240

Reason(s) for filing (Check proper box)

- [ ] New Well
- [x] Recompletion
- [ ] Change in Ownership

Change in Transporter of:

- [ ] Oil
- [ ] Dry Gas
- [ ] Casinghead Gas
- [ ] Condensate

Other (Please explain): Request 1000 bbl testing allowable 7090' - 7388' (Wolfcamp perfs) FOR MARCH

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease (State, Federal or Fee)	Lease No.
Milo S' Federal	1	Chalk Bluff Wolfcamp	Federal	LC-067858

Location

Unit Letter F : 1650 Feet From The North Line and 1653 Feet From The West

Line of Section 11 Township 18-S Range 27-E , NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [x] or Condensate [ ]: The Permian Corporation Permian Corp. 9/1/87

Address (Give address to which approved copy of this form is to be sent): P.O. Box 1183, Houston, Tx 77001

Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [ ]: _____

Address (Give address to which approved copy of this form is to be sent): _____

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
					No	

If this production is commingled with that from any other lease or pool, give commingling order number: _____

NOTE: *Complete Parts IV and V on reverse side if necessary.*

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given is true and complete to the best of my knowledge and belief.

Gary C. Clark
(Signature)
Asst. Admin Analyst
(Title)
3-1-85
(Date)

OIL CONSERVATION DIVISION

APPROVED MAR 6 1985, 19__

BY Original Signed By Leslie A. Clements

TITLE Supervisor District II

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

OPS NMOCD, A 1-JRB 1-FJN 1-GCC

IV. COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
Elevations *(DF, RKB, RT, GR, etc.)*	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
Perforations			Depth Casing Shoe

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE *(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)*

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method *(Flow, pump, gas lift, etc.)*	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method *(pitot, back pr.)*	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

Drawer DD Artesia, NM.

DISTRICT OFFICE #2

Jan. thru Apr. 1985

NO. 2159 T

SUPPLEMENT TO THE OIL PRORATION SCHEDULE

DATE March 6, 1985

PURPOSE ALLOWABLE ASSIGNMENT - TESTING

Effective March 1, 1985 a testing allowable of 1000 barrels of oil is hereby assigned to Amoco Production Company, Malco "S" Federal #1-F-11-18-27 in the Chalk Bluff Wolfcamp Pool for the month of March, 1985.

LAC:fc

Amoco Prod. Co.

PER

OIL CONSERVATION DIVISION

DISTRICT SUPERVISOR

DISTRIBUTION: WHITE-OPERATOR. GREEN-TRANSPORTER. CANARY-OCC SANTA FE. PINK-OFFICE COPY. GOLDENROD-EXTRA COPY

Amoco Production Company

ENGINEERING CHART

SHEET NO. ___ OF ___

FILE

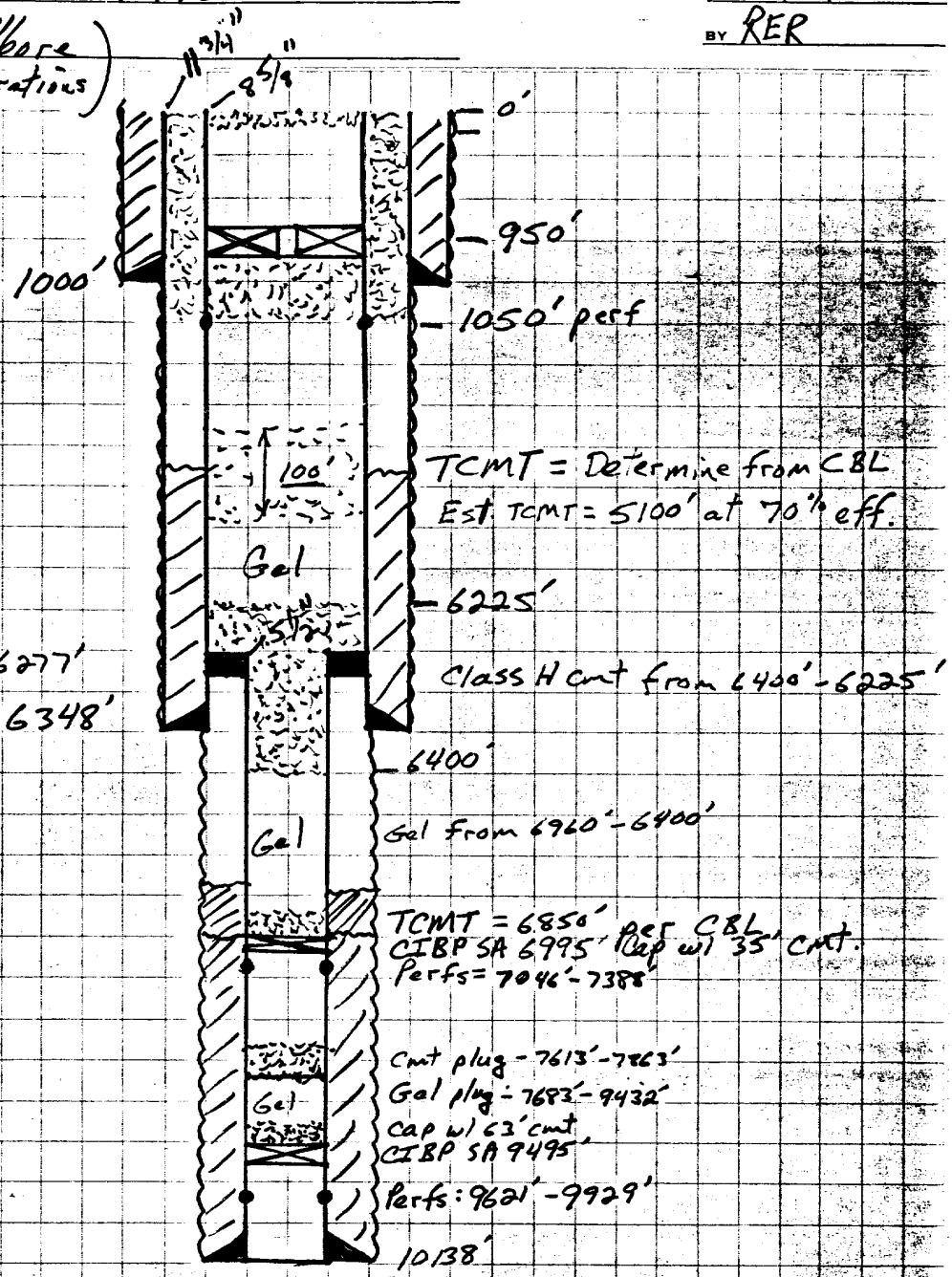
APPN

DATE 9/27/85

BY RER

SUBJECT Malco 'S' Federal No 1

(Proposed Wellbore after PxA operations)



Form 371 2-71

Form 3160-5
(November 1983)
(Formerly 9-331)

UNI D STATES
DEPARTMEN: OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPL TE* (Other instructions re- verse side)

District Office
Artesia, NM 88210

Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)

RECEIVED BY
NOV 15 1985
O. C. D.
ARTESIA, OFFICE

1. OIL WELL ☒ GAS WELL ☐ OTHER

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
AMOCO PRODUCTION COMPANY

8. FARM OR LEASE NAME
Malco "S" Federal

3. ADDRESS OF OPERATOR
P.O. BOX 68 HOBBS, NEW MEXICO 88240

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1650' FNL x 1653' FWL
(UNIT F, SE14, NW14)

10. FIELD AND POOL, OR WILDCAT
Chalk Bluff Wolfcamp

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-18-27

14. PERMIT NO.
3001520510

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3587' RDB

12. COUNTY OR PARISH
Eddy

13. STATE
NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☒	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Propose to permanently Plug & Abandon as follows: Notify BLM prior commencing operations.

1. MISU and POH with rods, pump, and tubing.
2. RIH with CIBP and set at 6995'. Cap CIBP with 35' class H cement. Run CBL from 6000' to TCMT.
3. Displace hole from 6960' to surface with 9#/gal gelled brine (at least 25 sx gel/100 BBls brine).
4. Spot 32 SX class H Neat cement from 6400'-6225'. (Cover 8 5/8" csg. shoe and top of 5 1/2" liner.)
5. Spot 26 SX class C Neat cement (±100') across the TCMT found in step 2 above.
6. Perforate 8 5/8" casing from 1050'-1049' with 4 JSPF.
7. RIH with 8 5/8" cement retainer. Set retainer at ±950'. Sting into retainer and pump 300 SX class C Neat cement and circulate to surface thru 8 5/8" and 11 3/8" bradenhead outlet.
8. Spot 10 SX Class C Neat cement from 40' to Surface. Remove well head and install P&A Marker.

0 + 5 BLM, 1 - JRB, 1 - FJN, 1 - CMH

18. I hereby certify that the foregoing is true and correct

SIGNED Charles M. Terrill TITLE Administrative Analyst (SG) DATE 9/30/85

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE 11-14-85

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

N. M. O. C. C. COPY

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER DRILLING

2. NAME OF OPERATOR
[illegible] Production Company ✓

3. ADDRESS OF OPERATOR
[illegible] HOBBS, N. M. 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1650' FNL x 1653' FWL Sec 11 (Unit F, SE/4 NW/4)

5. LEASE DESIGNATION AND SERIAL NO.
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
MALCO "A" Federal

9. WELL NO.
3

10. FIELD AND POOL, OR WILDCAT
WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-18-27 NMPM

12. COUNTY OR PARISH
EDDY

13. STATE
NM

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☒	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Spudding			☒
(Other)				(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Noble Drlg Co spudded 15" hole 2:30 PM 10-16-71. On 2-18-71, 11 3/4" OD 47# K-55 Casing was set @ 1000' w/ 970 Sx Incor + 2% CACL + 570# Tofplug. Cement circ. After WOC 18 hours. Tested csg w/ 1000 psi for 30 min. Test O.K.

Reduced hole to 11" @ 1000' and resumed drilling.

RECEIVED
OCT 22 1971
O. C. C.
ARTESIA, OFFICE

18. I hereby certify that the foregoing is true and correct

SIGNED _____ TITLE AREA SUPERINTENDENT DATE OCT 20 1971

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
OCT 21 1971
H. L. BEEKMAN
ACTING DISTRICT ENGINEER

Or 4- USGS-A
1- AC Jr
1- SUSP
2- HONDO-Roswell

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 1

1. OIL WELL ☐ GAS WELL ☐ OTHER: DRILLING

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Amoco Production Company

8. FARM OR LEASE NAME: MALCO "A" Federal

3. ADDRESS OF OPERATOR: BOX 68, HOBBS, N. M. 88240

9. WELL NO.: 3

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1650' FNL x 1653' FWL Sec. 11 (F, SE/4 NW/4)

10. FIELD AND POOL, OR WILDCAT: WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27 NMPM

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3587' R. D. B.

12. COUNTY OR PARISH: EDDY

13. STATE: NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☒	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)							

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

On 11-9-71, 8 5/8" OD 24-36# Casing was set @ 6348' w/ 300 sx. Class H. neat. After WOC 18 hours, tested casing w/ 1500 psi for 30 min. Test O.K.

Reduced hole to 7 7/8" @ 6348' and resumed drilling.

RECEIVED
NOV 16 1971
O. C. C.
ARTESIA, OFFICE

RECEIVED
NOV 15 1971
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED _____ TITLE AREA SUPERINTENDENT DATE NOV 11 1971

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
NOV 15 1971
H. L. BEEKMAN
ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

OJ 4- USGS-Art
1- DIV
1- SUSP
1- RRY
2- HONDO-Roswell

N. M. O. C. C. COPY

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424

5. LEASE DESIGNATION AND SERIAL NO.
LC-[illegible]

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
JAN [illegible] 1972

1. OIL WELL ☐ GAS WELL ☐ OTHER

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
[illegible] Production Company

8. FARM OR LEASE NAME
[illegible] Federal

3. ADDRESS OF OPERATOR
[illegible], Roswell, N. M. 88240

9. WELL NO.
A 3

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1980' FNL & 1980' FWL Sec. 11 (F, SE/4 NW/4)

10. FIELD AND POOL, OR WILDCAT
[illegible]

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-16-27 NMPM

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3582' R.D.B.

12. COUNTY OR PARISH
Eddy

13. STATE
N.M.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☒	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Completion Report			☒
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

On 11-7-71, 5½" Casing Liner set from 6277' to 10138' Cmt Cemented w/ 500 sx. Class H 4% Gel 3% KCl CFR-2 Plus 150 sx. Class H w/ 3% KCl CFR-2. Rev. 45 sx. Ran Temp Survey. Tested Casing w/ 2000 psi for 30 min. Test O.K. Lo. Top Liner w/ 125 sx Class H & 3% CFR-2. Pressured 2000 psi. OK. Perf 9521-27, 67-72, 82, 86 w/ 2 SPF.

Evaluating.

RECEIVED
DEC 29 1971
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

TD 10,138'

~~[illegible] from Molco A Federal [illegible]~~

18. I hereby certify that the foregoing is true and correct

SIGNED _____ TITLE AREA SUPERINTENDENT DATE _____

(This space for Federal or State office use)

APPROVED BY [signature] TITLE DISTRICT ENGINEER DATE DEC 29 1971
CONDITIONS OF APPROVAL, IF ANY:

Cy-4 USGS-Art
1-Div
1-Supr
1-File
2-Hobbs

*See Instructions on Reverse Side

Form 9-330
(Rev. 5-63)

N. M. O. C. C. COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

RECEIVED JAN 7 1972 O. C. C. ARTESIA, OFFICE

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: Amoco Production Company

3. ADDRESS OF OPERATOR: BOX 68, HOBBS, N. M. 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 1650' FNL x 1653' FWL Sec. 11 (7, SW/4 NW/4)
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: LC-067858
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: MALCO "A" FEDERAL
9. WELL NO.: 3
10. FIELD AND POOL, OR WILDCAT: Scoggin Draw-Morrow-Gas ~~WILDCAT~~ R-4291
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 5-1-72 11-18-27 NMPM
12. COUNTY OR PARISH: EDDY
13. STATE: N.M.
14. PERMIT NO. / DATE ISSUED:

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
10-16-71	12-5-71	12-20-71	3587 R.D.B.	—

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
10,168	10,000		→	0-TD	—

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 9621-9929'

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: GR-N, PROX, POROSITY, ETC.

27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
11 3/4"	47#	1000'	15"	970 Sx	
8 5/8"	32#	6348'	11"	300 "	
5 1/2" LINER	17#	6277-10138'	7 7/8"	855 "	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8	9504	9491

31. PERFORATION RECORD (Interval, size and number)
9621-27', 67-72', 82', 86'
9735', 39', 42', 72', 75-84', 91-95'
9851-56', 58', 64', 66',
9929'
w/2JSPF

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
9735-9929'	300 gal 10% HCF x 3% HCL

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
12-16-71	FLW	SHUT-IN

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
1-2-72	4	VARIOUS	→	9.3	708	0	76 136

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
2035-2689	PKR	→	56	10 785 (AOF)	0	54°

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): TO BE SOLD - MARKET PENDING

TEST WITNESSED BY

35. LIST OF ATTACHMENTS: NONE

RECEIVED JAN-6 1972 U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED: TITLE: AREA SUPERINTENDENT

*(See Instructions and Spaces for Additional Data on Reverse Side)

03-USGS-ART
1-DIV
1-Well file
1-RBY
2-HOBBS

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Penn Morrow	9621	9929	Gas and Dist Zone

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Queen	1020	
Grburg	1516	
San And	1887	
Yeso	3457	
Abo	5087	
Wolfcamp	8405	
Cisco	7745	
Canyon	8365	
Atoka	9277	
Chester	9960	

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
FEB 3 1972
O. C. C.
ARTESIA, OFFICE

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR
[illegible] Production Company ✓

3. ADDRESS OF OPERATOR
[illegible], Roswell, N. M. 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1650' FNL x 1653' FWL Sec. 11 (Unit F, SE/4 NW/4)

5. LEASE DESIGNATION AND SERIAL NO.
LC-037688

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
MALCO "S" Federal

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Scott Draw Morrow-Gas
Wildcat R-4291
8-1-72

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-18-27 NMPM

12. COUNTY OR PARISH
EDDY

13. STATE
N.M.

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3587' RDB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)							

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Well name and number changed
From: MALCO "A" Federal Well No. 3
To: MALCO S Federal Well No. 1

Completion horizon and type well occasioned changes.

RECEIVED
JAN 21 1972
U. S. GEOLOGICAL SURVEY
ARTESIA

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE AREA SUPERINTENDENT DATE JAN 19 1972

(This space for Federal or State office use)

APPROVED BY [signature] TITLE DISTRICT ENGINEER DATE FEB 2 1972

CONDITIONS OF APPROVAL, IF ANY:

ON 4- USGS- ART
1- DIV
1- DOSP
1- RRY
2- HONDO

*See Instructions on Reverse Side

NO. OF COPIES RECEIVED	5	
DISTRIBUTION		
SANTA FE	1	
FILE	1	✓
U.S.G.S.		
LAND OFFICE		
TRANSPORTER OIL	1	
TRANSPORTER GAS	1	
OPERATOR		
PRORATION OFFICE		

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS
(DEVIATION SURVEYS - BACK SIDE)

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

RECEIVED
DEC 29 1972
O. C. C.
ARTESIA, OFFICE

API-30-015-20510

I.

Operator: Amoco Production Company

Address: BOX 68, HOBBS, N. M. 88240

Reason(s) for filing *(Check proper box)*

New Well [X]
Recompletion [ ]
Change in Ownership [ ]

Change in Transporter of:
Oil [ ] Dry Gas [X]
Casinghead Gas [ ] Condensate [ ]

Other *(Please explain)*

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
MALCO "S" FEDERAL	1	SCOGGIN DRAW-MORROW Gas	State, Federal or Fee FED	LC-067858

Location

Unit Letter F ; 1650 Feet From The NORTH Line and 1653 Feet From The WEST

Line of Section 11 Township 18-S Range 27-E , NMPM, EDDY County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [ ] or Condensate [X]	Address *(Give address to which approved copy of this form is to be sent)*
Amoco Production Company (Trucks)	P. O. Box 3119, Midland, Texas 79701
Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [X]	Address *(Give address to which approved copy of this form is to be sent)*
Amoco Production Company (DAU)	P. O. Box 68, Hobbs, New Mexico 88240

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	F	11	18-S	27-E	Yes	12-27-72

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.
		X	X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
10-16-71	12-20-71	10,168'	10,000'
Elevations *(DF, RKB, RT, GR, etc.)*	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
3587' RDB	Penn-Morrow	9,621	9,504'

Perforations: 9621'-27',67'-72', 82',86',9735',39',42',72',75'-84',91'-95',9851'-56', 58',64',66',9929'

Depth Casing Shoe: 10,138'

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
15"	11-3/4"	1000'	970 SX
11"	8-5/8"	6348'	300 SX
7-7/8"	5-1/2"	6277'-10138'	855 SX
	2 3/8"	9504 Pkr @ 9491	

V. TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method *(Flow, pump, gas lift, etc.)*	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
AAOF - 10785	4 Hr.	12	54°
Testing Method *(pitot, back pr.)*	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
4 - Pt	2862	PKR	VARIOUS

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION COMMISSION

APPROVED DEC 29 1972, 19 _____

BY W. A. Gressett

0 & 4 - NMOCC-Art.
1 - Div
1 - JEL
1 - OBP
1 - Susp
1 - RRY
2 - Hondo

(Signature) AREA ~~SUPERINTENDENT~~

(Title) Engineer

(Date) 12-27-72

TITLE OIL AND GAS INSPECTOR

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

DEVIATION SURVEYS

DEPTH	DEGREES OFF
740	1/2
1300	1/4
1670	1/4
2040	1/4
2460	1/2
2790	1/2
2970	1-1/4
3500	3/4
4000	3/4
4560	1°
4890	1°
5100	1-1/4
5610	1
6020	2-1/2
6195	2-1/2
6345	2
6970	2-1/4
7510	1
8152	1-3/4
9430	3/4
10165	1

The above are true to the best of my knowledge.

James E. Tyler

AREA ~~SUPERINTENDENT~~ Engineer

Sworn to this date. December 27, 1972

D. L. Martin

NOTARY PUBLIC IN & FOR LEA COUNTY, NEW MEXICO

MY COMMISSION EXPIRES 6-15-76

NM OIL CONS. COMMISSION
1000 RD
ARTESIA, NM 88210

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Amoco Production Company

3. ADDRESS OF OPERATOR
P. O. Box 68, Hobbs, New Mexico 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1650' FNL x 1653' FWL, Unit F
AT TOP PROD. INTERVAL: Sec. 11, T-18-S, R-27-E
AT TOTAL DEPTH:

5. LEASE
LC-067858

RECEIVED
MAY - 6 1982
O. C. D.
ARTESIA, OFFICE

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Malco "S" Federal

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Scoggin Draw-Morrow Gas

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-18-27

12. COUNTY OR PARISH: Eddy
13. STATE: NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
3587' RDB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☒
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Moved in service unit 3-2-82. Ran swab for 8 hrs. with initial fluid level 2100 ft. from surface. Final fluid level 9400 ft. from surface. Ran gamma ray temp. log. Pumped 8000 gal 7-1/2% HCL NEFE acid with additives staged with 150 ball sealers. Ran after gamma ray and temp. treatment log. Ran swab with light show of gas. Moved out service unit 3-8-82. Flow tested for 48 hrs. and flowed 342 MCF. Returned well to production.

ACCEPTED FOR RECORD
APR 27 1982
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

0+4-USGS, A 1-Hou 1-Susp 1-CLF

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Cathy L. Forman TITLE Ast. Adm. Analyst DATE 3-16-82

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

RECEIVED
MAR 22 1982
OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

*See Instructions on Reverse Side

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

c/SF

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Amoco Production Company

3. ADDRESS OF OPERATOR
P. O. Box 68, Hobbs, New Mexico 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1650' FNL x 1653' FWL, Unit F
AT TOP PROD. INTERVAL: Sec. 11, T-18-S, R-27-E
AT TOTAL DEPTH:

5. LEASE
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Malco "S" Federal

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Scoggin Draw-Morrow Gas

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-18-27

12. COUNTY OR PARISH: Eddy
13. STATE: NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
3587' RDB

RECEIVED
MAY - 4 1982
O. C. D.
ARTESIA, OFFICE

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☒
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

DISCLAIMER
APR 23 1982
OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Moved in service unit 4-5-82. Swabbed 6 hrs. with initial fluid level 5000 ft. from surface. Final fluid level 9000 ft. from surface. Pumped 5500 gal XL-4 gel, 2750 gal CO_2, and 2310# 20/40 sand. Pumped 2500 gal XL-4 gel, 1-1/4 gal CO_2, and 2310# 20/40 sand. Flushed with 48 bbls 10# gel. Flow tested for 96 hrs. and flowed 12 BC, 12 BLW, 4 BW, and 3108 MCF. Returned well to production.

0+4-USGS, A 1-Hou 1-Susp 1-CLF

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Cathy L. Forman TITLE Ast. Adm. Analyst DATE 4-19-82

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED FOR RECORD
PETER W. CHESTER
MAY 3 1982
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

*See Instructions on Reverse Side

NM OIL CONS. COMMISSI
Drawer DD
Artesia, NM 88210

9/SF

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

RECEIVED
JUN 11 1983
O. C. D.
ARTESIA, OFFICE

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Amoco Production Company

3. ADDRESS OF OPERATOR
P. O. Box 68, Hobbs, New Mexico 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1650' FNL X 1653' FWL, Unit F
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Malco "S" Federal

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Scoggin Draw Morrow Gas

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-18-27

12. COUNTY OR PARISH: Eddy
13. STATE: NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
3587' RDB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☒
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Moved in service unit 1-11-83. Killed well with 50 bbls 10# 2% KCL water. Pulled tubing and packer. Ran packer and 2-7/8" tubing and tested to 8000 psi. Packer set at 9515'. Fractured with 20,000 gal 40# gelled 2% KCL water and 10,000 gals. CO2 carrying 20,500# sand. Flushed with 71 bbl 10# 2% KCL water. Flowed well on 32/64" choke for 1/2 hrs. at 75 psi. Flowed 3 hrs. on 48/64" choke at 50 psi. Well died. Pulled tubing and packer. Ran 2-3/8" tubing, F-nipple, 2-3/8" tubing, packer, on-off tool and 2-3/8" tubing. Packer set at 9432' and tailpipe landed at 9527'. Swabbed 8 hrs. and recovered 60 BLW with Strong show of gas. Moved out service unit 1-16-83. Moved in and rigged up Swab unit 1-16-83. Swabbed 12 days. Moved out Swab unit 2-1-83. Connected well to gas sales line 2-2-83. Flowed 144 hrs. and produced 0 BF and 701 MCF. Last 24 hrs flowed 0 BF and 120 MCF. Returned well to production.

Subsurface Safety Valve: Manu. and Type 0+4-BLM, R, 1-HOU, 1-SUSP 1-CMH 1-W. Stafford, HOU Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Charles M. Lewing TITLE Ast. Adm. Analyst DATE 6-1-83

(This space for Federal or State office use)

RECEIVED
JUN 6 1983
OIL & GAS
MINERALS MGMT. SERVICE
ROSWELL, NEW MEXICO

ACCEPTED FOR RECORD

APPROVED BY _____ TITLE _____ DATE FEB 16 1983
CONDITIONS OF APPROVAL, IF ANY:

JUL 7 1983

*See Instructions on Reverse Side
ROSWELL, NEW MEXICO

Artesia, NM 88210

Form 3160-5
November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

C/SF

RECEIVED BY
FEB 28 1985
O. C. D.
ARTESIA, OFFICE

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1. OIL WELL ☐ GAS WELL ☒ OTHER Recompletion

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Amoco Production Company

8. FARM OR LEASE NAME: Malco S Federal

3. ADDRESS OF OPERATOR: P.O. Box 68, Hobbs, NM 88240

9. WELL NO.: 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1650'FNL X 1653'FWL (SE/4, NW/4, Unit F)

10. FIELD AND POOL, OR WILDCAT: Chalk Bluff Wolfcamp

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3587' RDB

12. COUNTY OR PARISH: Eddy

13. STATE: NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

MISU 1-21-85. Released pkr. and pulled tbg. Ran cast iron bridge plug and set at 9495'. Pumped 5 sx Class H cmt. Spotted gel plug 9432'-9683'. Spotted 25 sx Class H plug 7863'-7613'. Pulled tbg. Perf'd 7046'-7062', 7090'-7100', 7382'-7388' with 4 SPF. Ran tbg., pkr. and set retrievable bridge plug at 7444'. Pulled tbg. and set pkr. at 7280'. Swbd. Acidized with 1000 gals. 15% NEFE HCL and 1000 gals. 5% HCL. Swbd. Released pkr. and reset at 6842'. Tested pkr. to 500 PSI and OK. Set retrievable bridge plug at 7200'. Tested RBP to 500 PSI and OK. Swbd. Ran before-treatment survey and acidized with 5000 gals. gelled 15% NEFE HCL. Tagged Radio Active material. Ran after-treatment survey. Swbd. Released pkr. and pulled tbg. and ran retrievable head, seating nipple and tbg. to 7188'. Cleaned out sand to 7200'. Ran seating nipple,

D+5-BLM, C 1-JRB 1-FJN 1-GCC 2-NMOCD, A

18. I hereby certify that the foregoing is true and correct

SIGNED Bonita Coble TITLE Administrative Analyst DATE 2-22-85

(This space for Federal or State office use)

APPROVED BY ACCEPTED FOR RECORD TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

FEB 28 1985

Post ID 2
3-8-85
P+A Morrow

*See Instructions on Reverse Side

tail-pipe, tbg., and tbg. anchor. Seating nipple landed at 7441', and set tbg. anchor at 7005'. Ran rods and pmp. MOSU 1-30-85. Built wellhead and connected to flw line on 1-31-85. Began pmp testing 2-1-85. Pump tested approx. 8 days. Last 24 hrs. pmpd 0 BO X 180 BW X 0 MCF. MISU 2-11-85. Pulled rods and pmp. Pulled tbg. and ran pkr., seating nipple and tbg. Retrievable bridge plug set at 7150'. Tested RBP to 1000 PSI and OK. Set pkr. at 7073'. Swbd. Released pkr., ran tbg. and latched on to RBP. Pulled tbg. Ran Cast iron bridge plug and set at 7080'. Ran cmt. ret. and set at 6962'. Pumped 75 sx Class H Neat. Reversed out 5 sx cmt. POOH. Drilled out cmt. to 7070'. Ran tbg. and tagged cast iron bridge plug at 7080'. Pulled tbg., drill collar and bit. Ran cmt. retainer and set at 6955'. Squeezed 125 sx Class H cmt and 10 sx below retainer and 103 sx formation. Reversed out 12 sx and pulled tbg.

Form 3160-5
Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

C/SI

RECEIVED BY
MAR 13 1985
O. C. D.
ARTESIA, OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

5. LEASE DESIGNATION AND SERIAL NO.
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
Amoco Production Company ✓

8. FARM OR LEASE NAME
Malco 'S' Federal

3. ADDRESS OF OPERATOR
P.O. Box 68, Hobbs NM 88240

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1650' FNL X 1653' FWL
(Unit F, SE/4 NW/4)

10. FIELD AND POOL, OR WILDCAT
Chalk Bluff Wolfcamp

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-18-27

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3587' RDB

12. COUNTY OR PARISH
Eddy

13. STATE
NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Production start-up			☒
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

This is to inform you that production from pump testing began on the Malco 'S' Federal No. 1 2-26-85. Produced 9 BO, 150 bbls W, and 0 gas. The subject well is currently being recompleted from the Morrow to the Wolfcamp.

0+5 BLM,R 1-JRB 1-FJN 1-GCC cc-BLM,C

18. I hereby certify that the foregoing is true and correct

SIGNED Gary C. Clark TITLE Asst. Admin. Analyst DATE 2-27-85

(This space for Federal or State office use)

APPROVED BY ACCEPTED FOR RECORD TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

MAR 12 1985

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-5
(November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

RECEIVED BY
APR 12 1985
O. C. D.
ARTESIA, OFFICE

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO. LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR: Amoco Production Company

8. FARM OR LEASE NAME: Molco "S" Federal

3. ADDRESS OF OPERATOR: P.O. Box 68, Hobbs NM 88240

9. WELL NO.: 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1650' FNL x 1653' FWL (Unit F, SE/4 NW/4)

10. FIELD AND POOL, OR WILDCAT: Chalk Bluff Wolfcamp

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3587' RDB

12. COUNTY OR PARISH: Eddy

13. STATE: NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Status Update			☒
(Other)				(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drilled out cmt retainer to 7071' and pressure tested to 1000 psi for 30 min, OK. Drilled out and cleaned out to 7504'. Circulated clean and POH. Ran production equipment, tail pipe landed at 7432'. Began pump testing 2-23-85. Pump tested apx 20 days, last 24 hrs pumped 0 BO, 110 BW, and 0 MCF. Well is currently shut in for evaluation.

0+5 BLM, C 1-JRB 1-FJN 1-GCC

18. I hereby certify that the foregoing is true and correct

SIGNED Gary C. Clark TITLE Asst. Admin. Analyst DATE 4-2-85

(This space for Federal or State office use)

APPROVED BY ACCEPTED FOR RECORD TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

APR 11 1985

*See Instructions on Reverse Side

CARLSBAD, NEW MEXICO

Form 3160-4
(November 1983)
(formerly 3-330)

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

RECEIVED BY
MAY 13 1985
O.C.D.
ARTESIA, OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other
b. TYPE OF COMPLETION: NEW WELL [ ] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [X] DIFF. RESVR. [ ] Other

5. LEASE DESIGNATION AND SERIAL NO. LC-067858
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME: MALCO "S" FEDERAL
9. WELL NO. 1
10. FIELD AND POOL, OR WILDCAT: Chalk Bluff Wolfcamp
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 11-18-27

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY
3. ADDRESS OF OPERATOR: P.O. BOX 68 HOBBS, NM 88240
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface (1650' FNL X 1653' FWL (Unit F, SE/4 NW/4))
At top prod. interval reported below
At total depth

14. PERMIT NO. | DATE ISSUED
12. COUNTY OR PARISH: EDDY
13. STATE: N.M

15. DATE SPUDDED: 1-21-85 (O/C)
16. DATE T.D. REACHED
17. DATE COMPL. (Ready to prod.)
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 3587' RDB
19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD: 10,168'
21. PLUG, BACK T.D., MD & TVD: 7613'
22. IF MULTIPLE COMPL., HOW MANY*
23. INTERVALS DRILLED BY → ROTARY TOOLS | CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 7046'-7388' Wolfcamp
25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: CBL
27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
11-3/4"	47#	1000'	15"	970 SX	CIRC
8-5/8"	32#	6348'	11"	300 SX	UNKNOWN
5-1/2"	17#	6277'-10,138'	7 7/8"	855 SX	7165'

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)
7046'-62', 7090'-7100', 7382'-88'
W/ 4 DPJSPF (.380")

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7382'-88'	1000 Gal 15% NEFE HCL
7046'-7100'	4000 Gal Gelled 15% NEFE HCL W/ Ball Sealers and 1000 Gal 15% NEFE HCL

33.* PRODUCTION

DATE FIRST PRODUCTION: 2-26-85
PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): Pumping
WELL STATUS (Producing or shut-in): Shut-IN

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3-18-85	24		→	0			0

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
		→				

ACCEPTED FOR RECORD
MAY 10 1985
CARLSBAD, NEW MEXICO

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)
TEST WITNESSED BY

35. LIST OF ATTACHMENTS
Logs Mailed 1-31-85

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [signature] TITLE Administrative Analyst DATE 6 MAY 1985

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

ATE RIM-C, 1-TPR, 1-FJN, 1-NIG

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

Form 3160-5
November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

C/SF

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
MAR 17 1986
O. C. D.
ARTESIA, OFFICE

5. LEASE DESIGNATION AND SERIAL NO.: LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1. OIL WELL ☐ GAS WELL ☐ OTHER PxA

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

8. FARM OR LEASE NAME: Malco "5" Federal

3. ADDRESS OF OPERATOR: P.O. BOX 68 HOBBS, NEW MEXICO 88240

9. WELL NO.: 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface

1650' FNL x 1653' FWL
(UNIT F, SE/4, NW/4)

10. FIELD AND POOL, OR WILDCAT: Chalk Bluff Wolfcamp

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27

14. PERMIT NO.: 3001520510

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3587' RDB

12. COUNTY OR PARISH: Eddy

13. STATE: NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☒
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)							

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

1. MIRU 11-25-85 and POH with rods, pump, and tubing.
2. Ran CIBP and set at 6995'.
3. Ran free point log.
4. RIH w/tubing to 6950' and pumped 80 BBls brine gel. Capped CIBP with 15 sx Class H cement.
5. Displaced hole with 150 BBL brine gel
6. Spotted 40 sx class H neat cement from 6400-6225'. WOC. Tagged cement at 6211'.
7. Pulled tubing to 5350' and pumped 26 sx class C cement. Displaced w/brine gel.
8. Perforated 1049-50' w/4 DPJ SPF. Established circulation out 11 3/4" casing.
9. Set cement retainer at 950'. Squeezed w/350 sx class C cement. Circulated 175 sx out 11 3/4" casing.

0 + 5 BLM-CA, 1 - JRB, 1 - FJN, 1- CMH

18. I hereby certify that the foregoing is true and correct

SIGNED Charles M. Herring TITLE Administrative Analyst (SG) DATE 12/5/85

(This space for Federal or State office use)

APPROVED BY [illegible] TITLE DATE 3-14-89
CONDITIONS OF APPROVAL, IF ANY:

Post ID-2
3-21-86
P+A

*See Instructions on Reverse Side

10. Spotted 10SX class C cement surface plug.
11. Installed dry hole marker and MOSU 12-3-85.

NEW MEXICO
OIL CONSERVATION DIVISION
P. O. DRAWER DD
ARTESIA, NM 88210

DATE December 15,1986

NOTICE OF GCNM'S GAS DISCONNECTION:

OPERATOR: Amoco Production Company

LEASE: Malco "S" Federal

WELL NUMBER: #1 WELL UNIT LETTER: F

SECTION: 11 TOWNSHIP: 18 RANGE: 27

POOL: ~~Scroggin Draw Morrow~~ Chalk Bluff Wolfcamp

DATE WELL DISCONNECTED: 12/15/86

GCNM'S STATION NUMBER: 1890-00

GAS COMPANY OF NEW MEXICO
TRANSPORTER

Grady L. Gist
GRADY L. GIST
GAS CONTROL SUPERVISOR

RECEIVED BY
JAN - 5 1987
O. C. D.
ARTESIA, OFFICE

cc: Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Tom Sanders - Albuquerque
Carolyn Titus - Albuquerque
Merle Dennis - Kutz Canyon
Oil Conservation file
Grady Gist file

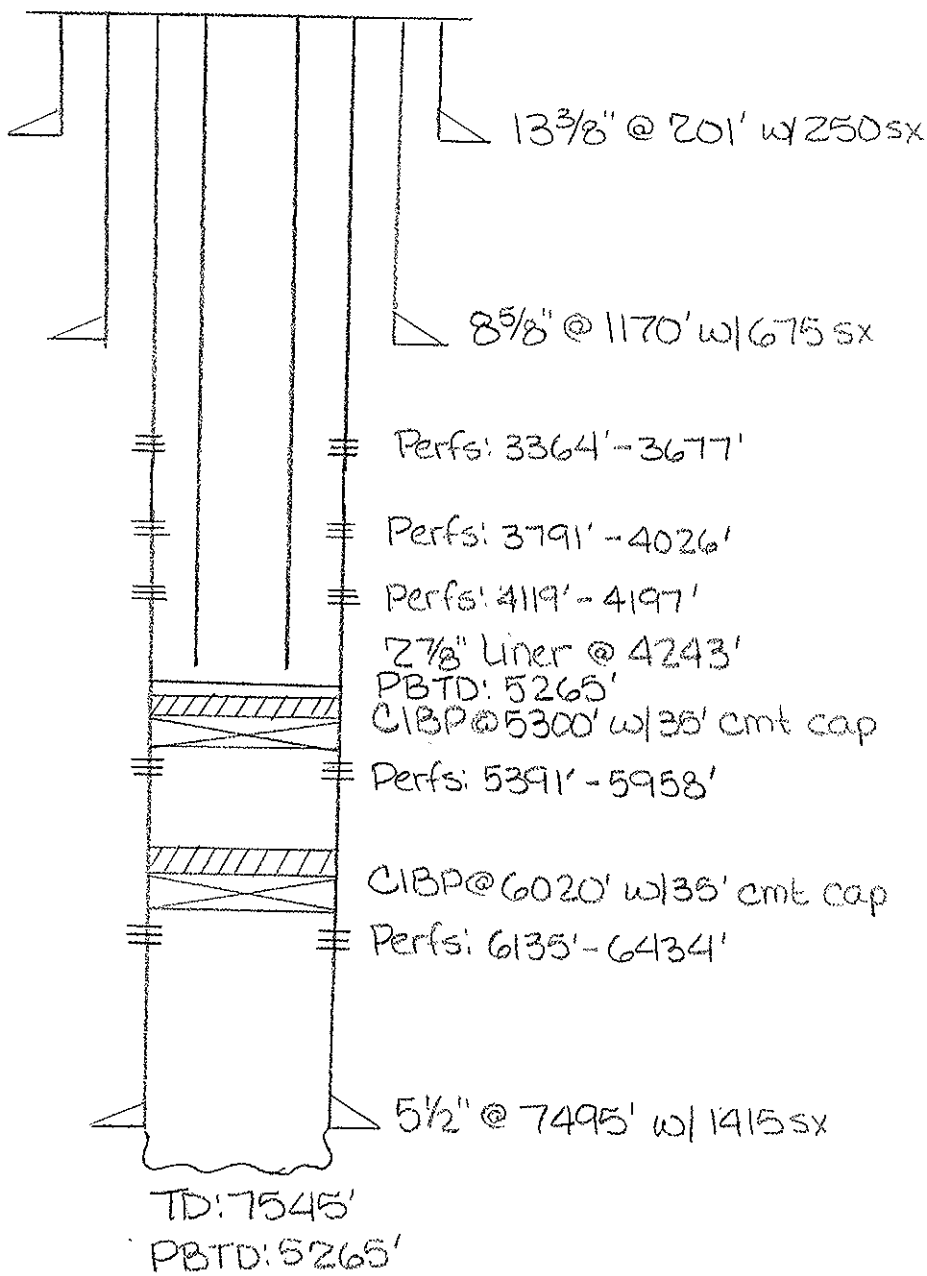
SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 65
Artificial Penetration Review

OPERATOR Mack Energy Corp
LEASE State H
WELL NUMBER 2
DRILLED 10-31-07
PLUGGED NA

STATUS Active Oil
LOCATION Sec. 2 -T18S-R27E
MUD FILLED BOREHOLE NA
TOP OF INJECTION ZONE ~7215
API NO. 30-015- 35814

REMARKS: Calc. Top of Cement behind 5½" @ surface.



District II
1301 W. Grand Ave., Artesia, NM 88210
Phone:(505) 748-1283 Fax:(505) 748-9720

Form C-101
Permit 60506

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
MACK ENERGY CORP PO BOX 960 ARTESIA , NM 88211	13837
	3. API Number 30-015-35814

4. Property Code	5. Property Name	6. Well No.
303847	STATE H	002

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
H	2	18S	27E	H	2063	N	441	E	EDDY

8. Pool Information

CHALK BLUFF; WOLFCAMP GAS	96963

Additional Well Information

9. Work Type	10. Well Type	11. Cable/Rotary	12. Lease Type	13. Ground Level Elevation
New Well	OIL		State	3590
14. Multiple	**15. Proposed Depth**	**16. Formation**	**17. Contractor**	**18. Spud Date**
N		Wolfcamp		9/20/2007

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water
50		

Pit: Liner: Synthetic ☐ mils thick Clay ☐ Pit Volume: bbls Drilling Method:
Closed Loop System ☒ Fresh Water ☐ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐

19. Proposed Casing and Cement Program

Type	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	8.625	24	360	400	0
Prod	7.875	5.5	17	7313	1300	0

Casing/Cement Program: Additional Comments

Mack Energy proposes to drill a 12 1/4 hole to 360', run 8 5/8 casing and cement. Drill a 7 7/8 hole to 7313', run 5 1/2 casing and cement. Note: On production string a fluid caliper will be run and will figure cement with 25% excess, attempt to circ.

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	2000	2000	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**	OIL CONSERVATION DIVISION
	Approved By: Bryan Arrant
Printed Name: Electronically filed by Jerry Sherrell	Title: Geologist
Title: Production Clerk	Approved Date: 9/19/2007 | Expiration Date: 9/19/2008
Email Address: jerrys@mackenergycorp.com	
Date: 9/11/2007 | Phone: 505-748-1288	Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(505) 393-6161 Fax:(505) 393-0720
District II
1301 W. Grand Ave., Artesia, NM 88210
Phone:(505) 748-1283 Fax:(505) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102
Permit 60506

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name
30-015-35814	96963	CHALK BLUFF; WOLFCAMP GAS

4. Property Code	5. Property Name	6. Well No.
303847	STATE H	002

7. OGRID No.	8. Operator Name	9. Elevation
13837	MACK ENERGY CORP	3590

10. Surface Location

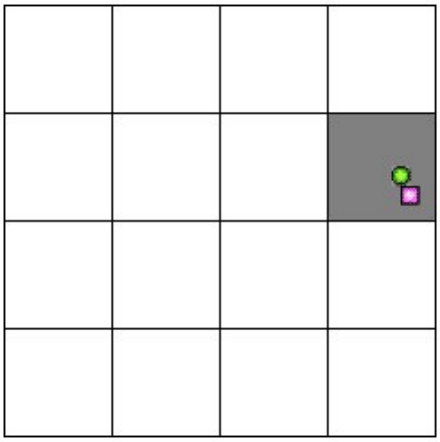
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
H	2	18S	27E		2063	N	441	E	EDDY

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
H	2	18S	27E	H	2300	N	340	E	EDDY

12. Dedicated Acres	13. Joint or Infill	14. Consolidation Code	15. Order No.
40.00			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

E-Signed By: Jerry Sherrell
Title: Production Clerk
Date: 9/11/2007

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Surveyed By: Ronald Eidson
Date of Survey: 8/28/2007
Certificate Number: 3239

Permit Comments

Operator: MACK ENERGY CORP , 13837
Well: STATE H #002
API: 30-015-35814

Created By	Comment	Comment Date
JWSHERRELL	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	9/11/2007

Permit Conditions of Approval

Operator: MACK ENERGY CORP , 13837
Well: STATE H #002
API: 30-015-35814

OCD Reviewer	Condition
BArrant	Pit construction and closure must satisfy all requirements of your approved plan, O.C.D. Rule 19.15.2.50, and the Pit and Below-Grade Tank Guidelines
BArrant	As noted, operator to drill surface hole w/fresh water mud.
BArrant	Cement to cover all oil, gas and water bearing zones.

SEP 12 2007
OCD-ARTESIA

MACK Energy Corporation

30-015-35814

Mack Energy Corp.

Eddy County, NM (NAD 27 NME)
State H #2
State H #2
Wellbore #1

Plan: Plan #1

Standard Planning Report

11 September, 2007

Scientific Drilling
Directional Drilling Operations

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well State H #2
Company:	Mack Energy Corp.	TVD Reference:	WELL @ 3606.00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	MD Reference:	WELL @ 3606.00ft (KB Elev)
Site:	State H #2	North Reference:	Grid
Well:	State H #2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project Eddy County, NM (NAD 27 NME)

Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site State H #2

Site Position:		Northing:	646,629.20ft	Latitude:	32° 46' 39.510 N
From:	Map	Easting:	528,184.50ft	Longitude:	104° 14' 29.874 W
Position Uncertainty:	0.00 ft	Slot Radius:	ft	Grid Convergence:	0.05 °

Well State H #2

Well Position	+N/-S	0 00 ft	Northing:	646,629 20 ft	Latitude:	32° 46' 39.510 N
	+E/-W	0 00 ft	Easting:	528,184 50 ft	Longitude:	104° 14' 29.874 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	3,606.00 ft	Ground Level:	0 00 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	9/11/2007	8.37	60.68	49,269

Design Plan #1

Audit Notes:

Version:		Phase:	PLAN	Tie On Depth:	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	156.92

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	
460 00	0.00	0.00	460.00	0.00	0.00	0.00	0.00	0.00	0 00	
768.78	6.18	156.92	768.18	-15.29	6.52	2 00	2 00	0 00	156 92	
2,854.52	6 18	156 92	2,841.82	-221 71	94.48	0.00	0.00	0.00	0 00	
3,163.30	0.00	0.00	3,150 00	-237 00	101 00	2.00	-2 00	0 00	180.00	
7,313 30	0.00	0 00	7,300.00	-237.00	101.00	0.00	0 00	0.00	0.00	PBHL-State H #1

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well State H #2
Company:	Mack Energy Corp.	**TVD Reference:**	WELL @ 3606.00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	**MD Reference:**	WELL @ 3606.00ft (KB Elev)
Site:	State H #2	**North Reference:**	Grid
Well:	State H #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0 00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0 00	0.00	0.00
200.00	0.00	0 00	200.00	0 00	0.00	0.00	0 00	0.00	0.00
300.00	0.00	0 00	300.00	0.00	0.00	0.00	0.00	0.00	0 00
400.00	0.00	0.00	400 00	0.00	0.00	0.00	0.00	0.00	0 00
460.00	0.00	0.00	460.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP 460' Start 2.0°/100'									
500 00	0.80	156 92	500.00	-0.26	0.11	0.28	2.00	2.00	0.00
600.00	2.80	156.92	599 94	-3.15	1 34	3.42	2.00	2.00	0.00
700 00	4.80	156.92	699.72	-9.24	3.94	10 05	2 00	2.00	0.00
768 78	6.18	156.92	768.18	-15.29	6.52	16 62	2 00	2 00	0.00
EOC hold 6.18°									
800.00	6.18	156.92	799.22	-18.38	7 83	19 98	0.00	0.00	0.00
900.00	6 18	156.92	898.64	-28.28	12.05	30 74	0.00	0.00	0.00
1,000 00	6.18	156.92	998.06	-38.18	16.27	41.50	0.00	0.00	0.00
1,100.00	6.18	156 92	1,097.48	-48.07	20 49	52.26	0.00	0.00	0.00
1,200.00	6.18	156 92	1,196.90	-57 97	24.70	63.01	0.00	0 00	0.00
1,300.00	6.18	156.92	1,296.32	-67.87	28 92	73.77	0 00	0.00	0.00
1,400.00	6.18	156.92	1,395 74	-77.76	33.14	84.53	0 00	0.00	0.00
1,500 00	6.18	156.92	1,495 16	-87.66	37.36	95.29	0 00	0 00	0.00
1,600.00	6 18	156 92	1,594.58	-97.55	41 57	106.04	0.00	0.00	0.00
1,700.00	6.18	156 92	1,694.00	-107.45	45.79	116.80	0.00	0 00	0.00
1,800.00	6.18	156.92	1,793 42	-117.35	50.01	127.56	0.00	0.00	0.00
1,900.00	6.18	156.92	1,892 84	-127.24	54.23	138.32	0.00	0.00	0.00
2,000.00	6.18	156.92	1,992.26	-137.14	58 44	149.07	0.00	0.00	0.00
2,100 00	6 18	156.92	2,091.68	-147.04	62 66	159.83	0.00	0.00	0.00
2,200.00	6.18	156.92	2,191.10	-156.93	66 88	170.59	0.00	0.00	0.00
2,300.00	6.18	156.92	2,290.52	-166 83	71.10	181.35	0.00	0.00	0.00
2,400.00	6.18	156.92	2,389.94	-176.73	75.31	192.10	0.00	0.00	0.00
2,500.00	6.18	156.92	2,489.36	-186.62	79 53	202 86	0.00	0.00	0.00
2,600.00	6 18	156.92	2,588 78	-196.52	83.75	213.62	0.00	0.00	0.00
2,700.00	6.18	156.92	2,688.20	-206.41	87.97	224.38	0.00	0.00	0 00
2,800.00	6 18	156.92	2,787.62	-216.31	92.18	235.13	0.00	0.00	0.00
2,854.52	6 18	156 92	2,841.82	-221.71	94.48	241.00	0.00	0.00	0.00
Start Drop 2.0°/100'									
2,900.00	5.27	156.92	2,887.07	-225.88	96.26	245.53	2.00	-2.00	0.00
3,000.00	3.27	156.92	2,986 79	-232.72	99.18	252.97	2.00	-2.00	0.00
3,100.00	1.27	156.92	3,086.71	-236.36	100.73	256.92	2.00	-2.00	0.00
3,163.30	0 00	0.00	3,150.00	-237.00	101.00	257.62	2.00	-2 00	0.00
EOC hold 0.0°									
3,200 00	0.00	0 00	3,186.70	-237.00	101.00	257.62	0.00	0.00	0 00
3,300.00	0.00	0 00	3,286.70	-237.00	101.00	257.62	0.00	0.00	0 00
3,400.00	0 00	0.00	3,386.70	-237.00	101.00	257.62	0.00	0.00	0.00
3,500.00	0 00	0 00	3,486 70	-237.00	101.00	257.62	0.00	0.00	0 00
3,600.00	0.00	0 00	3,586 70	-237.00	101.00	257.62	0 00	0 00	0 00
3,700 00	0.00	0.00	3,686.70	-237.00	101 00	257.62	0 00	0.00	0.00
3,800.00	0.00	0 00	3,786.70	-237 00	101 00	257.62	0 00	0 00	0.00
3,900.00	0.00	0.00	3,886.70	-237.00	101.00	257.62	0 00	0 00	0.00
4,000.00	0.00	0 00	3,986 70	-237.00	101.00	257.62	0.00	0.00	0.00
4,100.00	0 00	0.00	4,086 70	-237.00	101.00	257.62	0.00	0.00	0 00
4,200.00	0.00	0 00	4,186.70	-237.00	101 00	257 62	0 00	0.00	0.00
4,300.00	0.00	0 00	4,286.70	-237.00	101.00	257 62	0 00	0 00	0.00
4,400.00	0 00	0.00	4,386.70	-237.00	101.00	257.62	0.00	0.00	0 00

Database:	EDM 2003 16 Single User Db	**Local Co-ordinate Reference:**	Well State H #2
Company:	Mack Energy Corp.	**TVD Reference:**	WELL @ 3606.00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	**MD Reference:**	WELL @ 3606.00ft (KB Elev)
Site:	State H #2	**North Reference:**	Grid
Well:	State H #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,500.00	0.00	0.00	4,486 70	-237.00	101.00	257.62	0.00	0.00	0.00
4,600.00	0.00	0.00	4,586.70	-237.00	101.00	257.62	0.00	0.00	0.00
4,700.00	0.00	0.00	4,686.70	-237.00	101.00	257 62	0.00	0.00	0.00
4,800.00	0.00	0.00	4,786 70	-237.00	101 00	257.62	0.00	0.00	0 00
4,900.00	0.00	0 00	4,886.70	-237 00	101.00	257.62	0.00	0.00	0.00
5,000.00	0.00	0.00	4,986.70	-237.00	101 00	257 62	0.00	0.00	0 00
5,100 00	0 00	0 00	5,086.70	-237.00	101 00	257.62	0 00	0.00	0.00
5,200 00	0 00	0 00	5,186.70	-237.00	101 00	257.62	0.00	0.00	0.00
5,300.00	0.00	0 00	5,286.70	-237.00	101 00	257 62	0.00	0.00	0.00
5,400 00	0 00	0.00	5,386 70	-237.00	101 00	257.62	0.00	0.00	0.00
5,500 00	0 00	0.00	5,486.70	-237.00	101.00	257.62	0.00	0.00	0.00
5,600.00	0.00	0.00	5,586.70	-237.00	101.00	257.62	0.00	0.00	0.00
5,700.00	0.00	0.00	5,686 70	-237.00	101.00	257.62	0.00	0.00	0 00
5,800.00	0 00	0.00	5,786 70	-237.00	101.00	257.62	0.00	0.00	0 00
5,900.00	0.00	0 00	5,886 70	-237.00	101 00	257.62	0 00	0.00	0.00
6,000 00	0 00	0.00	5,986 70	-237.00	101.00	257.62	0.00	0 00	0 00
6,100.00	0.00	0.00	6,086 70	-237.00	101.00	257.62	0.00	0.00	0 00
6,200.00	0 00	0 00	6,186.70	-237.00	101.00	257 62	0 00	0.00	0.00
6,300.00	0.00	0.00	6,286.70	-237 00	101.00	257.62	0 00	0.00	0.00
6,400.00	0.00	0.00	6,386.70	-237.00	101.00	257 62	0.00	0 00	0 00
6,500.00	0.00	0.00	6,486.70	-237.00	101.00	257.62	0.00	0 00	0.00
6,600.00	0.00	0.00	6,586.70	-237.00	101.00	257 62	0.00	0.00	0.00
6,700.00	0.00	0.00	6,686.70	-237 00	101.00	257.62	0 00	0.00	0.00
6,800.00	0.00	0.00	6,786.70	-237.00	101.00	257.62	0.00	0.00	0.00
6,900.00	0 00	0.00	6,886.70	-237.00	101 00	257.62	0.00	0 00	0.00
7,000.00	0 00	0 00	6,986 70	-237.00	101.00	257 62	0.00	0.00	0.00
7,100.00	0.00	0.00	7,086.70	-237.00	101.00	257.62	0.00	0.00	0.00
7,200.00	0 00	0 00	7,186.70	-237.00	101.00	257.62	0.00	0 00	0.00
7,300 00	0.00	0.00	7,286.70	-237 00	101.00	257.62	0 00	0.00	0.00
7,313.30	0.00	0 00	7,300.00	-237.00	101.00	257 62	0.00	0.00	0.00
East HL-State H #1 - PBHL-State H #1 - South HL-State H #1									

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL-State H #1 - plan hits target - Circle (radius 10.00)	0 00	0.00	7,300.00	-237.00	101.00	646,392.20	528,285 50	32° 46' 37.164 N	104° 14' 28.693 W
South HL-State H #1 - plan misses by 14.14ft at 7313.30ft MD (7300.00 TVD, -237 00 N, 101.00 E) - Rectangle (sides W0.00 H200.00 D0.00)	0.00	0 00	7,300.00	-247.00	111 00	646,382.20	528,295 50	32° 46' 37.065 N	104° 14' 28.576 W
East HL-State H #1 - plan misses by 14.14ft at 7313.30ft MD (7300.00 TVD, -237.00 N, 101 00 E) - Rectangle (sides W800.00 H0.00 D0 00)	0.00	0 00	7,300.00	-247.00	111 00	646,382 20	528,295.50	32° 46' 37.065 N	104° 14' 28.576 W

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well State H #2
Company:	Mack Energy Corp	**TVD Reference:**	WELL @ 3606.00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	**MD Reference:**	WELL @ 3606.00ft (KB Elev)
Site:	State H #2	**North Reference:**	Grid
Well:	State H #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

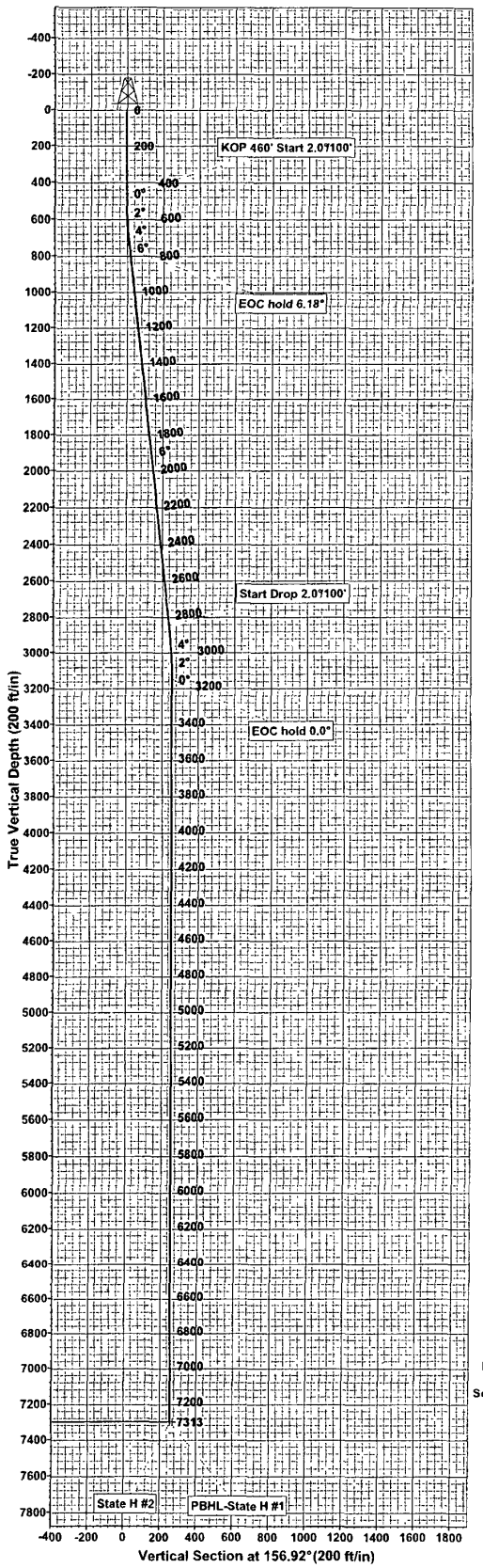
Plan Annotations

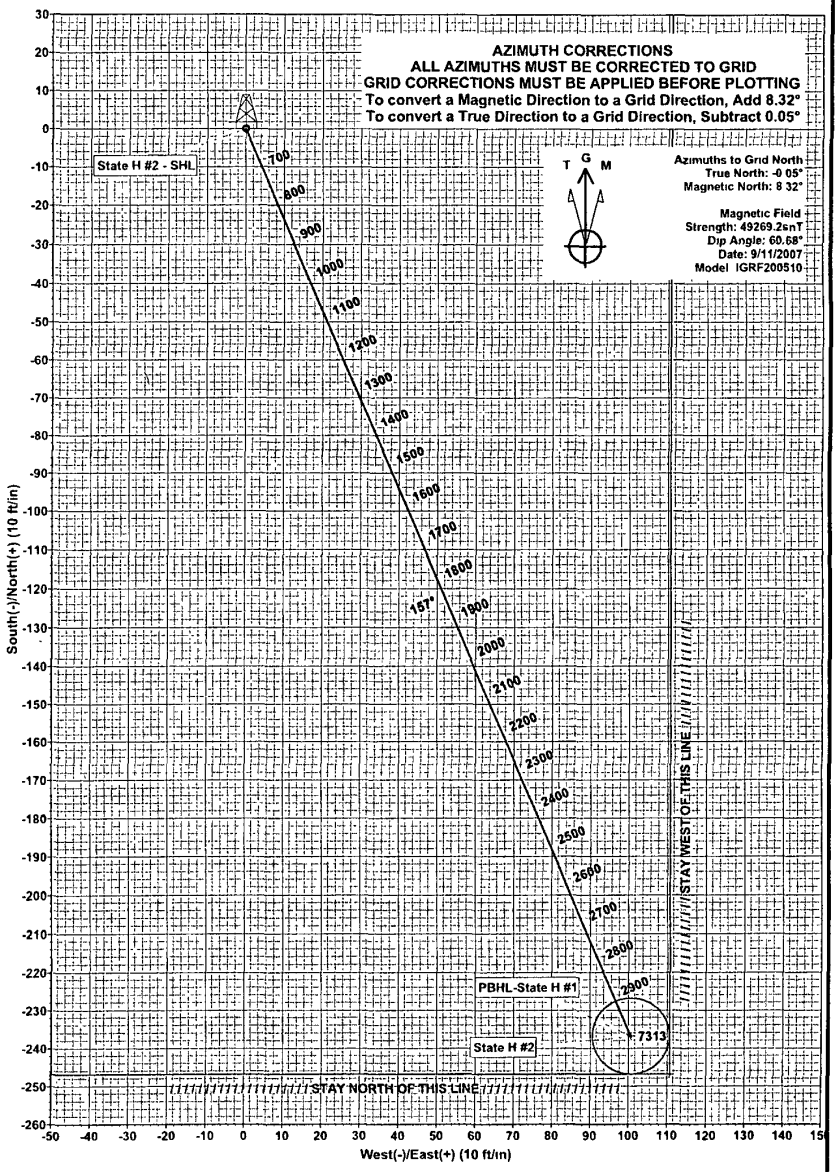
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
460.00	460.00	0.00	0.00	KOP 460' Start 2.0°/100'
768.78	768.18	-15.29	6.52	EOC hold 6.18°
2,854.52	2,841.82	-221.71	94.48	Start Drop 2.0°/100'
3,163.30	3,150 00	-237.00	101.00	EOC hold 0.0°

MACK Energy Corporation

Scientific Drilling for Mack Energy Corp.
Site: Eddy County, NM (NAD 27 NME)
Well: State H #2
Wellbore: Wellbore #1
Design: Plan #1

Scientific Drilling
Directional Drilling Operations





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	460.00	0.00	0.00	460.00	0.00	0.00	0.00	0.00	0.00	
3	768.78	6.18	156.92	768.18	-15.29	6.52	2.00	156.92	16.62	
4	2854.52	6.18	156.92	2841.82	-221.71	94.48	0.00	0.00	241.00	
5	3163.30	0.00	0.00	3150.00	-237.00	101.00	2.00	180.00	257.62	
6	7313.30	0.00	0.00	7300.00	-237.00	101.00	0.00	0.00	257.62	PBHL-State H #1

WELL DETAILS: State H #2

Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	646629.20	528184.50	32°46' 39.510 N	104°14' 29.874 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
East HL-State H #1	7300.00	-247.00	111.00	646382.20	528295.50	32°46' 37.065 N	104°14' 28.576 W	Rectangle (Sides: L800.00 W0.00)
PBHL-State H #1	7300.00	-237.00	101.00	646392.20	528285.50	32°46' 37.164 N	104°14' 28.693 W	Circle (Radius: 10.00)
South HL-State H #1	7300.00	-247.00	111.00	646382.20	528295.50	32°46' 37.065 N	104°14' 28.576 W	Rectangle (Sides: L0.00 W200.00)

PROJECT DETAILS: Eddy County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

Plan: Plan #1 (State H #2/Wellbore #1)

Created By: Julio Pina Date: 11-Sep-07
Checked: _____ Date: _____
Reviewed: _____ Date: _____
Approved: _____ Date: _____

Submit 3 Copies To Appropriate District Office
District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W Grand Ave , Artesia, NM 88210
District III
1000 Rio Brazos Rd , Aztec, NM 87410
District IV
1220 S St Francis Dr , Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

WELL API NO. 30-015-35814	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No. B-9391	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)	7. Lease Name or Unit Agreement Name State H
1. Type of Well: Oil Well ☐ Gas Well ☒ Other	8. Well Number 2
2. Name of Operator Mack Energy Corporation	9. OGRID Number 013837
3 Address of Operator P. O. Box 960 Artesia, NM 88211-0960	10. Pool name or Wildcat Chalk Bluff Wolfcamp

4 Well Location
Unit Letter H 2063 feet from the North line and 441 feet from the East line
Section 2 Township 18S Range 27E NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3590' GR

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type_____ Depth Groundwater_____ Distance from nearest fresh water well_____ Distance from nearest surface water_____

Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
OTHER: Change casing ☒		OTHER: _____ ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Mack Energy would like to change the casing string approved on this APD.

Drill a 17 1/2" hole to 200', run 13 3/8" 48# H-40 casing and cement.
Drill a 12 1/4" hole to 1150', run 8 5/8" 24# J-55 casing and cement.
Drill a 7 7/8" hole to approximately 7300', run 5 1/2" 17# L-80 casing and cement.

OCT 22 2007
OCD-ARTESIA

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐**

SIGNATURE Jerry W. Sherrell TITLE Production Clerk DATE 10/19/07

Type or print name Jerry W. Sherrell E-mail address: jerrys@mackenergycorp.com Telephone No (505)748-1288

For State Use Only

APPROVED BY: BRYAN G. ARRANT DISTRICT II GEOLOGIST TITLE _____ DATE OCT 22 2007

Conditions of Approval (if any):

MACK Energy Corporation

Mack Energy Corp.

Eddy County, NM (NAD 27 NME)
State H #2
State H #2
Wellbore #1

OCT 22 2007
OCD-ARTESIA

Plan: Plan #2

Standard Planning Report

19 October, 2007

Scientific Drilling
Directional Drilling Operations

Database:	EDM 2003 16 Single User Db	**Local Co-ordinate Reference:**	Well State H #2
Company:	Mack Energy Corp	**TVD Reference:**	WELL @ 3606 00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	**MD Reference:**	WELL @ 3606 00ft (KB Elev)
Site:	State H #2	**North Reference:**	Grid
Well:	State H #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Project Eddy County, NM (NAD 27 NME)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site State H #2

Site Position:		**Northing:**	646,629 20 ft	**Latitude:**	32° 46' 39 510 N
From:	Map	**Easting:**	528,184 50 ft	**Longitude:**	104° 14' 29 874 W
Position Uncertainty:	0 00 ft	**Slot Radius:**	ft	**Grid Convergence:**	0 05 °

Well State H #2

Well Position	**+N/-S**	0 00 ft	**Northing:**	646,629 20 ft	**Latitude:**	32° 46' 39 510 N
	+E/-W	0 00 ft	**Easting:**	528,184 50 ft	**Longitude:**	104° 14' 29 874 W
Position Uncertainty		0 00 ft	**Wellhead Elevation:**	3,606 00 ft	**Ground Level:**	0 00 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	10/19/2007	8 36	60 68	49,259

Design Plan #2

Audit Notes:

Version:	**Phase:**	PLAN	**Tie On Depth:**	0 00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0 00	0 00	156 92

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	
1,250 00	0 00	0.00	1,250 00	0.00	0 00	0 00	0 00	0.00	0.00	
1,785 00	10 70	156.92	1,781.89	-45.82	19 53	2 00	2 00	0 00	156 92	
2,636 01	10 70	156.92	2,618 11	-191 18	81 47	0 00	0 00	0.00	0 00	
3,171 01	0 00	0 00	3,150 00	-237 00	101 00	2 00	-2 00	0.00	180 00	
7,321 01	0 00	0 00	7,300 00	-237.00	101 00	0 00	0 00	0 00	0 00	PBHL-State H #1

Database:	EDM 2003 16 Single User Db	**Local Co-ordinate Reference:**	Well State H #2
Company:	Mack Energy Corp	**TVD Reference:**	WELL @ 3606.00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	**MD Reference:**	WELL @ 3606 00ft (KB Elev)
Site:	State H #2	**North Reference:**	Grid
Well:	State H #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00
1,150 00	0 00	0 00	1,150 00	0 00	0 00	0.00	0 00	0 00	0.00
8 5/8" Casing									
1,250 00	0 00	0.00	1,250 00	0 00	0.00	0 00	0 00	0 00	0 00
KOP 1250' Start 2.0°/100'									
1,300 00	1 00	156 92	1,299 99	-0 40	0 17	0 44	2.00	2 00	0 00
1,400 00	3 00	156 92	1,399 93	-3 61	1 54	3.93	2 00	2 00	0 00
1,500 00	5.00	156.92	1,499 68	-10 03	4.27	10 90	2 00	2 00	0 00
1,600 00	7 00	156 92	1,599 13	-19 64	8 37	21 35	2.00	2 00	0 00
1,700 00	9 00	156.92	1,698 15	-32 45	13.83	35 27	2 00	2.00	0 00
1,785 00	10 70	156 92	1,781 90	-45 82	19 53	49 81	2 00	2 00	0 00
EOC hold 10.70°									
1,800 00	10 70	156 92	1,796.63	-48 38	20 62	52 59	0 00	0 00	0.00
1,900 00	10 70	156 92	1,894 89	-65 46	27 90	71 16	0 00	0 00	0 00
2,000 00	10 70	156 92	1,993 15	-82 54	35 18	89 73	0 00	0 00	0 00
2,100 00	10 70	156 92	2,091 41	-99 63	42 46	108.29	0 00	0 00	0 00
2,200 00	10.70	156.92	2,189 68	-116 71	49.74	126 86	0 00	0 00	0 00
2,300.00	10.70	156.92	2,287 94	-133 79	57.01	145 43	0 00	0.00	0 00
2,400 00	10 70	156.92	2,386 20	-150 87	64.29	163 99	0 00	0 00	0 00
2,500 00	10.70	156 92	2,484 46	-167 95	71.57	182 56	0.00	0 00	0 00
2,599 99	10 70	156 92	2,582 72	-185 03	78 85	201 13	0 00	0 00	0 00
2,636 01	10 70	156 92	2,618 11	-191 18	81 47	207 81	0 00	0 00	0.00
Start Drop 2.0°/100'									
2,699 99	9.42	156.92	2,681 11	-201 46	85 85	218 99	2 00	-2 00	0 00
2,799 99	7 42	156 92	2,780 03	-214 93	91 59	233 63	2 00	-2 00	0 00
2,899 99	5.42	156.92	2,879 39	-225 22	95.98	244 81	2 00	-2 00	0 00
2,999 99	3 42	156 92	2,979 09	-232 31	99 00	252 52	2 00	-2 00	0 00
3,099 99	1 42	156 92	3,079 00	-236 19	100 65	256 74	2 00	-2 00	0.00
3,171.01	0.00	0.00	3,150 00	-237 00	101 00	257.62	2 00	-2 00	0 00
EOC hold 0.0°									
7,321 01	0 00	0 00	7,300.00	-237 00	101 00	257 62	0 00	0 00	0.00
East HL-State H #1 - PBHL-State H #1 - South HL-State H #1									

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL-State H #1 - plan hits target - Circle (radius 10 00)	0 00	0 00	7,300 00	-237 00	101.00	646,392 20	528,285 50	32° 46' 37 164 N	104° 14' 28.693 W
South HL-State H #1 - plan misses by 14 14ft at 7321.01ft MD (7300.00 TVD, -237 00 N, 101.00 E) - Rectangle (sides W0 00 H200.00 D0.00)	0 00	0 00	7,300 00	-247 00	111 00	646,382 20	528,295 50	32° 46' 37 065 N	104° 14' 28 576 W
East HL-State H #1 - plan misses by 14 14ft at 7321 01ft MD (7300 00 TVD, -237.00 N, 101.00 E) - Rectangle (sides W800 00 H0 00 D0 00)	0 00	0 00	7,300 00	-247 00	111 00	646,382.20	528,295 50	32° 46' 37 065 N	104° 14' 28.576 W

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well State H #2
Company:	Mack Energy Corp	**TVD Reference:**	WELL @ 3606 00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	**MD Reference:**	WELL @ 3606 00ft (KB Elev)
Site:	State H #2	**North Reference:**	Grid
Well:	State H #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (ft)	Hole Diameter (ft)
1,150 00	1,150 00	8 5/8" Casing	8 62500	12.25000

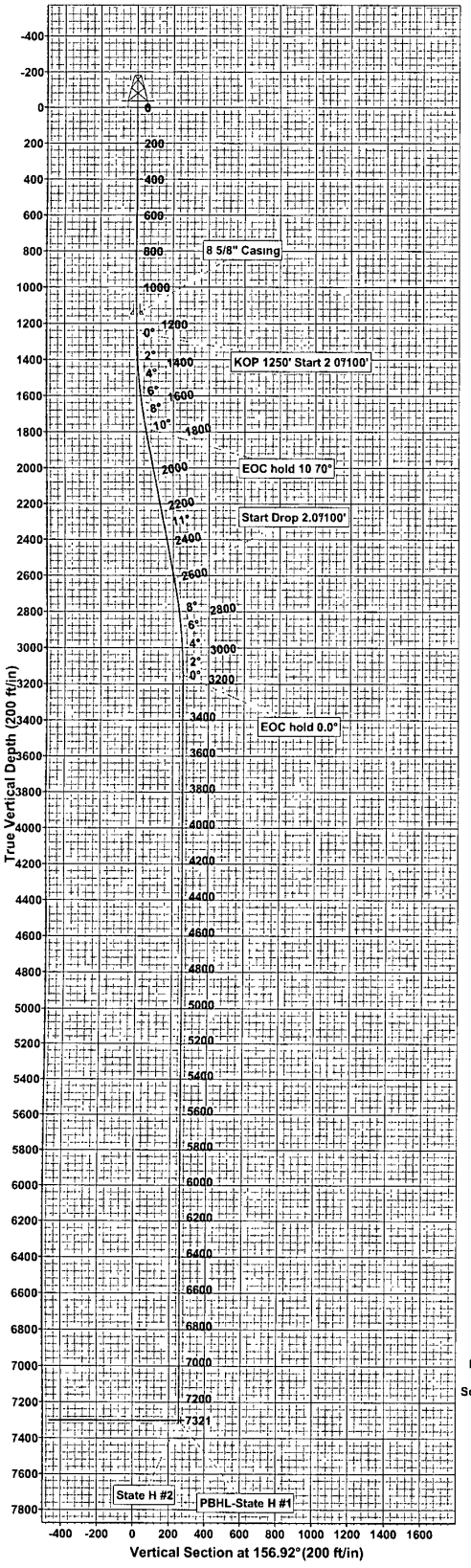
Plan Annotations

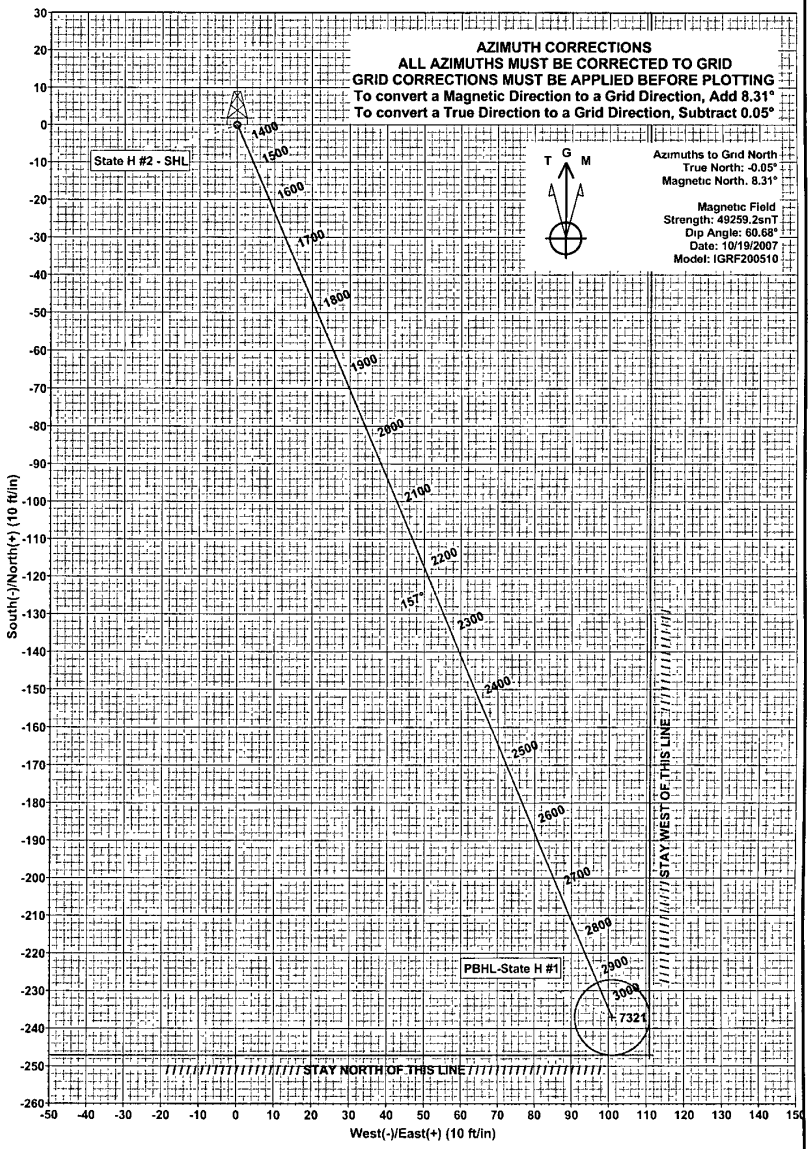
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
1,250 00	1,250 00	0 00	0 00	KOP 1250' Start 2 0°/100'
1,785 00	1,781 90	-45 82	19.53	EOC hold 10.70°
2,636 01	2,618 11	-191 18	81 47	Start Drop 2 0°/100'
3,171 01	3,150 00	-237 00	101 00	EOC hold 0 0°

MACK Energy Corporation

Scientific Drilling for Mack Energy Corp.
Site: Eddy County, NM (NAD 27 NME)
Well: State H #2
Wellbore: Wellbore #1
Design: Plan #2

Scientific Drilling
Directional Drilling Operations





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1250.00	0.00	0.00	1250.00	0.00	0.00	0.00	0.00	0.00	
3	1785.00	10.70	156.92	1781.89	-45.82	19.53	2.00	156.92	49.81	
4	2636.01	10.70	156.92	2618.11	-191.18	81.47	0.00	0.00	207.81	
5	3171.01	0.00	0.00	3150.00	-237.00	101.00	2.00	180.00	257.62	
6	7321.01	0.00	0.00	7300.00	-237.00	101.00	0.00	0.00	257.62	PBHL-State H #1

WELL DETAILS: State H #2

Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	646629.20	528184.50	32°46' 39.510 N	104°14' 29.874 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
East HL-State H #1	7300.00	-247.00	111.00	646382.20	528295.50	32°46' 37.065 N	104°14' 28.576 W	Rectangle (Sides: L800.00 W0.00)
PBHL-State H #1	7300.00	-237.00	101.00	646392.20	528285.50	32°46' 37.164 N	104°14' 28.693 W	Circle (Radius: 10.00)
South HL-State H #1	7300.00	-247.00	111.00	646382.20	528295.50	32°46' 37.065 N	104°14' 28.576 W	Rectangle (Sides: L0.00 W200.00)

PROJECT DETAILS: Eddy County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

Plan: Plan #2 (State H #2/Wellbore #1)

Created By: Julio Pina — Date: 19-Oct-07
Checked: _____ Date: _____
Reviewed: _____ Date: _____
Approved: _____ Date: _____

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(505) 393-6161 Fax:(505) 393-0720
District II
1301 W. Grand Ave., Artesia, NM 88210
Phone:(505) 748-1283 Fax:(505) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico

Energy, Minerals and Natural Resources

Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-103
Permit 65781

WELL API NUMBER
30-015-35814

5. Indicate Type of Lease
S

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFRENT RESERVIOR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:O

7. Lease Name or Unit Agreement Name
STATE H

8. Well Number
002

2. Name of Operator
MACK ENERGY CORP

9. OGRID Number
13837

3. Address of Operator
PO BOX 960 , , 11352 LOVINGTON HWY ARTESIA , NM 88211

10. Pool name or Wildcat

4. Well Location
Unit Letter H : 2063 feet from the N line and 441 feet from the E line
Section 2 Township 18S Range 27E NMPM Eddy County

11. Elevation (Show whether DR, KB, BT, GR, etc.)
3590 GR

Pit or Below-grade Tank Application ☐ or Closure ☐
Pit Type _____ Depth to Groundwater_____ Distance from nearest fresh water well_____ Distance from nearest surface water_____
Pit Liner Thickness:_____ mil Below-Grade Tank: Volume_____ bbls; Construction Material_____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTER CASING ☐
TEMPORARILY ABANDON ☐	CHANGE OF PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDON ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
Other:		Other: **Drilling/Cement**	☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work.) SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

10/31/2007 Spud 17 1/2 hole @ 10:00pm.
11/1/2007 TD @ 201. Ran 5jts 13 3/8 H-40 48# @ 201', Cmt w/250sx C+2%CC, circ 104sx, plug down 12:20pm. WOC 18hrs test to 1800# 30min, OK.
11/4/2007 TD 12 1/4 hole @ 1165'.
11/5/2007 Ran 27jts 8 5/8 J-55 32# @ 1170'. Cmt w/475sx C, 200sx C+2%CC, circ 218sx, plug down 3:00am. WOC 12hrs test to 600# 30min, OK.
11/20/2007 TD @ 7545'.
11/22/2007 Ran 177jts 5 1/2 J-55 17# @ 7495', Cmt w/530sx C, circ 217sx. 2nd stage 365sx C, 520sx C, plug down 6:55pm, circ 200sx. WOC 12hrs test to 600# 20min, OK.
10/31/2007 Spudded well.

Casing and Cement Program

Date	String	Fluid Type	Hole Size	Csg Size	Weight lb/ft	Grade	Est TOC	Dpth Set	Sacks	Yield	Class	1" Dpth	Pres Held	Pres Drop	Open Hole
11/01/07	Surf	FreshWater	17.5	13.375	48	H-40	0	201	250		C		1800	0	Y
11/05/07	Int1	FreshWater	12.25	8.625	32	J-55	0	1170	675		C		600	0	Y
11/22/07	Prod	CutBrine	7.875	5.5	17	J-55	0	7495	1415		C		600	0	Y

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Electronically Signed TITLE Production Clerk DATE 12/11/2007
Type or print name Jerry Sherrell E-mail address jerrys@mackenergycorp.com Telephone No. 505-748-1288

For State Use Only:
APPROVED BY: Bryan Arrant TITLE Geologist DATE 12/12/2007 7:46:02 AM

Submit 3 Copies To Appropriate District Office
District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W. Grand Ave, Artesia, NM 88210
District III
1000 Rio Brazos Rd, Aztec, NM 87410
District IV
1220 S St Francis Dr, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

WELL API NO. 30-015-35814	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No. B-9391	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)	7. Lease Name or Unit Agreement Name State H
1. Type of Well: Oil Well ☒ Gas Well ☐ Other FEB 26 2008	8. Well Number 2
2. Name of Operator Mack Energy Corporation OCD-ARTESIA	9. OGRID Number 013837
3. Address of Operator P. O. Box 960 Artesia, NM 88211-0960	10. Pool name or Wildcat Red Lake; Glorieta-Yeso, NE

4. Well Location
Unit Letter H 2063 feet from the North line and 441 feet from the East line
Section 2 Township 18S Range 27E NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3590' GR

Pit or Below-grade Tank Application ☐ **or Closure** ☐

Pit type_____ **Depth Groundwater**_____ **Distance from nearest fresh water well**_____ **Distance from nearest surface water**_____

Pit Liner Thickness: _____ mil **Below-Grade Tank: Volume** _____ **bbls; Construction Material**

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
OTHER: _____ ☐		OTHER: Completion ☒	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

12/15/2007 Perforated from 6134.5-6434' 57 holes.
12/17/2007 Acidized w/4500 gals 15%.
12/18/2007 RIH w/203 joints 2 7/8 tubing SN @ 6439'. RIH w/2 1/2"x2"x20' pump.
12/26/2007 Set CIBP @ 6020' w/35' cement cap. Perforated from 5789.5-5957.5' 52 holes.
12/27/2007 Acidized w/4500 gals 15%.
12/28/2007 Perforated from 5391-5700.5' 83 holes. Acidized w/5000 gals 15%.
12/29/2007 RIH w/188 joints 2 7/8 tubing SN @ 5965'. RIH w/2 1/2"x2"x20' pump.
1/7/2008 Set CIBP @ 5300' w/35' cement cap. Perforated from 4118.5-4197' 40 holes.
1/8/2008 Acidized w/2000 gals 15%.
1/9/2008 Frac w/8130# liteprop, 68,890# 16/30 sand, 14,046# siberprop, 91,292 gals 30/40# gel.
1/11/2008 RIH w/134 joints 2 7/8" tubing SN @ 4243'. RIH 2 1/2 x 2 x 20' Pump.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐**

SIGNATURE Jerry W. Sherrell TITLE Production Clerk DATE 2/25/08

Type or print name Jerry W. Sherrell E-mail address: jerrys@mackenergycorp.com Telephone No. (575)748-1288

For State Use Only

FOR RECORDS ONLY

APPROVED BY: _____ TITLE _____ DATE 2-28-08

Conditions of Approval (if any):

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

FEB 26 2008
OCD-ARTESIA

Form C-104
Revised Feb. 26, 2007

Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

1 Operator name and Address	2 OGRID Number
Mack Energy Corporation P.O. Box 960 Artesia, NM 88211-0960	013837
	3 Reason for Filing Code/ Effective Date NW

4 API Number	5 Pool Name	6 Pool Code
30-015-35814	Red Lake; Glorieta-Yeso, NE	~~51120~~ 96836

7 Property Code	8 Property Name	9 Well Number
303847	State H	2

H. Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	2	18S	27E		2063	North	441	East	Eddy

Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	2	18S	27E		2300	North	340	East	Eddy

12 Lse Code	13 Producing Method Code	14 Gas Connection Date	C-129 Permit Number	16 C-129 Effective Date	17 C-129 Expiration Date
S	P	1/11/08			

III. Oil and Gas Transporters

18 Transporter OGRID	19 Transporter Name and Address	20 O/G/W
015694	Navajo Refining PO Box 159 Artesia, NM 88211-0159	O
036785	DCP Midstream LP 4001 Penbrook Odessa, TX 79762	G

IV. Well Completion Data

21 Spud Date	22 Ready Date	23 TD	24 PBTD	25 Perforations	26 DHC, MC
10/31/2007	11/23/2007	7545'	5265'	4118.5-4197'	

27 Hole Size	28 Casing & Tubing Size	29 Depth Set	30 Sacks Cement
17 1/2	13 3/8	201	250
12 1/4	8 5/8	1170	675
7 7/8	5 1/2	7495	1415
	2 7/8	4243	

V. Well Test Data

31 Date New Oil	32 Gas Delivery Date	33 Test Date	34 Test Length	35 Tbg. Pressure	36 Csg. Pressure
1/14/2008	1/14/2008	1/30/08	24 hours		
37 Choke Size	**38 Oil**	**39 Water**	**40 Gas**		**41 Test Method**
	8	30	30		P

42 I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: Jerry W. Sherrell

Printed name: Jerry W. Sherrell

Title: Production Clerk

E-mail Address: jerrys@mackenergycorp.com

OIL CONSERVATION DIVISION

Approved by: Kimberly M. Wilson

Title: Compliance Officer

Approval Date: 3-5-08

Date: 2/25/08	Phone: (575)748-1288	

Submit to Appropriate District Office
State Lease - 6 copies
Fee Lease - 5 copies
DISTRICT I
P O Box 1980, Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd , Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87505

Form C-105
Revised 1-1-89

WELL API NO: 30-015-35814

5 Indicate Type of Lease: STATE ☒ FEE ☐

6 State Oil & Gas Lease No: B-9391

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1 Type of Well: OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER

b Type of Completion: NEW WELL ☒ WORK OVER ☐ Deepen ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER

7 Lease Name or Unit Agreement Name: State H

2 Name of Operator: Mack Energy Corporation

FEB 26 2008
OCD-ARTESIA

8 Well No: 2

3 Address of Operator: P.O. Box 960, Artesia, NM 88211-0960

9 Pool name or Wildcat: Red Lake; Glorieta-Yeso, NE

4. Well Location

Unit Letter H : 2063 Feet From The North Line and 441 Feet From The East Line

Section 2 Township 18S Range 27E NMPM Eddy County

10 Date Spudded	11 Date TD Reached	12 Date Compl (Ready to Prod.)	13 Elevations (DF & RKB, RT, GR, etc.)	14 Elev Casinghead
10/31/2007	11/21/2007	1/11/08	3590' GR	

15 Total Depth	16. Plug Back TD	17 If Multiple Compl How Many Zones?	18 Intervals Drilled By	Rotary Tools	Cable Tools
7545'	5265'			Yes	

19 Producing Interval(s), of this completion - Top, Bottom, Name: 4118.5-4197'

20 Was Directional Survey Made: Yes

21 Type Electric and Other Logs Run: Gamma Ray, Neutron, Density, Lateralog, Spectral Gamma Ray

22 Was Well Cored: No

23 **CASING RECORD (Report all strings set in well)**

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	48	201	17 1/2	250 sx	None
8 5/8	32	1170	12 1/4	675 sx	None
5 1/2	17	7495	7 7/8	1415 sx	None

24 LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25 TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2 7/8	4243'	

26 Perforation record (interval, size, and number)

6134.5-6434', .42, 57 CIBP @ 6020 w/35' cmt cap
5391-5957.5', .42, 92 CIBP @ 5300' w/35' cmt cap
4118.5-4197', .42, 40

27 ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
	See C-103 for detail

28 **PRODUCTION**

Date First Production	Production Method (Flowing, gas lift, pumping - Size and type pump)	Well Status (Prod. or Shut-in)
1/14/2008	2 1/2x2x20' Pump	Producing

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water- Bbl	Gas - Oil Ratio
1/30/08	24 hours			8	30	30	3750

Flow Tubing Press	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl	Gas - MCF	Water- Bbl.	Oil Gravity - API - (Corr.)
			8	30	30	

29 Disposition of Gas (Sold, used for fuel, vented, etc.): Sold

Test Witnessed By: Robert C. Chase

30 List Attachments: Deviation Survey and Logs

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature: Jerry W. Sherrell Printed Name: Jerry W. Sherrell Title: Production Clerk Date: 2/25/08

Silver Oak Drilling

PO Box 1370
Artesia, NM 88211-1370
(505) 748-1288

FEB 26 2008
OCD-ARTESIA

November 30, 2007

Mack Energy Corporation
PO Box 960
Artesia, NM 88211-0960

RE: State H #2
2310' FNL & 990' FEL
Sec. 2, T18S, R27E
Eddy County, New Mexico

Dear Sir,

The attached is the Deviation Survey for the above captioned re-entered well.

Very truly yours,

Leroy Curry
Drilling Superintendent

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 30th day of November, 2007.

Reginia L. Garner
Notary Public

OFFICIAL SEAL
REGINIA L. GARNER
NOTARY PUBLIC - STATE OF NEW MEXICO
My commission expires Aug. 30, 2008

Date	Depth	Dev	Dir
11/01/2007	133.00	0.50	0.00
11/02/2007	431.00	0.75	0.00
11/03/2007	700.00	0.50	0.00
11/04/2007	975.00	1.00	0.00
11/04/2007	1134.00	0.50	0.00
11/06/2007	1301.00	1.66	164.90
11/06/2007	1396.00	3.41	161.90
11/07/2007	1492.00	5.19	159.10
11/07/2007	1587.00	7.21	156.40
11/07/2007	1683.00	8.51	155.20
11/07/2007	1778.00	9.94	158.10
11/07/2007	1873.00	9.56	157.60
11/08/2007	1968.00	10.53	159.60
11/08/2007	2064.00	9.83	160.00
11/08/2007	2159.00	9.69	160.50
11/08/2007	2350.00	10.78	156.20
11/08/2007	2445.00	10.67	156.40
11/08/2007	2540.00	10.54	155.40
11/08/2007	2604.00	10.43	156.30
11/09/2007	2699.00	8.58	156.50
11/09/2007	2794.00	7.39	158.60
11/09/2007	2984.00	4.30	162.00
11/09/2007	3080.00	2.86	157.10
11/09/2007	3175.00	1.50	150.00
11/09/2007	3270.00	0.67	256.70
11/09/2007	3365.00	0.82	280.50
11/10/2007	3460.00	0.48	176.00
11/10/2007	3556.00	0.51	181.00
11/10/2007	3651.00	0.65	173.10
11/10/2007	3746.00	0.67	157.20
11/10/2007	3841.00	0.59	154.20
11/10/2007	3936.00	0.24	309.30
11/11/2007	4031.00	0.30	302.30
11/11/2007	4126.00	0.45	322.60
11/11/2007	4222.00	1.06	337.40
11/11/2007	4602.00	1.01	348.10
11/12/2007	4666.00	1.10	18.68
11/12/2007	4729.00	0.53	71.05
11/12/2007	4824.00	0.27	38.14
11/12/2007	4920.00	0.71	12.94
11/12/2007	5015.00	1.19	5.48
11/12/2007	5110.00	0.82	20.33
11/12/2007	5206.00	0.28	132.80
11/13/2007	5301.00	0.54	23.07
11/13/2007	5396.00	0.34	49.15
11/13/2007	5491.00	1.12	153.70
11/13/2007	5586.00	2.14	189.30
11/13/2007	5660.00	1.31	189.40
11/13/2007	5681.00	1.09	194.70
11/13/2007	5745.00	0.67	318.40
11/13/2007	5839.00	0.24	221.30
11/14/2007	5935.00	1.41	161.10
11/15/2007	5998.00	1.01	182.35
11/16/2007	6188.00	0.34	306.90
11/16/2007	6474.00	0.11	334.80
11/16/2007	6570.00	0.15	314.50
11/17/2007	6664.00	0.27	304.50
11/17/2007	6759.00	0.45	295.50
11/17/2007	6854.00	0.46	296.60
11/17/2007	6949.00	0.59	290.10
11/17/2007	7044.00	1.09	134.40
11/18/2007	7140.00	0.38	89.52
11/18/2007	7235.00	0.57	122.40
11/18/2007	7382.00	0.81	125.40

Scientific Drilling

FEB 26 2008
OCD-ARTESIA

MACK ENERGY

Field: Chalk Bluff
Site: Eddy County, NM
Well: State H #2
Wellpath: DH - Job #32D11071006
Survey: 11/05/07-11/14/07

This survey is correct to the best of my knowledge
and is supported by actual field data.

.....Company Representative

Notorized this date 19th of December, 2007.

Notary Signature
County of Midland
State of Texas

NOTARY PUBLIC STATE OF TEXAS
DEBORAH SUE BYNUM
Notary Public, State of Texas
My Commission Expires
5/9/08

Scientific Drilling

Scientific Drilling International
Survey Report

Company:	MACK ENERGY	**Date:** 12/16/2007	**Time:** 18:34.47	**Page:**	1
Field:	Chalk Bluff	**Co-ordinate(NE) Reference:**	Site: Eddy County, NM, Grid North		
Site:	Eddy County, NM	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	State H #2	**Section (VS) Reference:**	Well (0.00N,0.00E,156.92Azi)		
Wellpath:	VH - Job #32K11071013	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey:	11/06/07 KSRG 0'-1143'	**Start Date:**	11/06/2007
Company:	Scientific Drilling Internatio	**Engineer:**	Madrid w/P&M
Tool:	Keeper;Keeper Gyro	**Tied-to:**	From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0 00	0.00	359.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.62	77.45	100.00	0.10	0.12	0.53	0.62	0.54	77.45
200.00	0.42	110.33	199.99	0 45	0.11	1.40	0.35	1.40	85.60
300.00	0.37	96.72	299.99	0.86	-0.06	2.06	0.11	2.07	91.59
400.00	0.38	143.78	399.99	1.35	-0.36	2.58	0.30	2.61	98.00
500.00	0.26	212.14	499.99	1.80	-0.82	2.66	0.37	2.78	107.20
600.00	0.28	250.72	599.99	1.91	-1.10	2.30	0.18	2.55	115 41
700.00	0.44	271.18	699.99	1.74	-1.17	1.69	0.20	2.05	124.64
800.00	0.40	74.03	799.98	1.62	-1.06	1.64	0.83	1.96	122.94
900.00	1.01	96.02	899.98	2.09	-1.06	2.85	0.66	3.04	110.38
1000.00	0.95	87.15	999.96	2.81	-1.11	4.56	0.16	4.69	103.70
1100.00	0.56	76.15	1099.95	3.17	-0.95	5.86	0.41	5.94	99.24
1143.00	0.26	86.43	1142.95	3.24	-0.90	6.16	0.72	6.23	98.28

Scientific Drilling

Scientific Drilling International
Survey Report

Company:	MACK ENERGY	**Date:** 12/16/2007	**Time:** 19:33:59	**Page:**	1
Field:	Chalk Bluff	**Co-ordinate(NE) Reference:**	Site: Eddy County, NM, Grid North		
Site:	Eddy County, NM	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	State H #2	**Section (VS) Reference:**	Well (0.00N,0.00E,156.92Azi)		
Wellpath:	DH - Job #32D11071006	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey:	11/05/07-11/14/07 MWD 1206'-7367'	**Start Date:**	11/05/2007
Company:	Scientific Drilling Internatio	**Engineer:**	Hernandez/Biggs/Elger
Tool:	MWD;MWD	**Tied-to:**	From: Definitive Path

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
1143.00	0.26	86.43	1142.95	3.24	-0.90	6.16	0.00	6.23	98.28
1206.00	0.17	46.81	1205.95	3.26	-0.82	6.37	0.27	6.43	97.37
1301.00	1.66	164.91	1300.94	4.57	-2.06	6.83	1.84	7.14	106.75
1396.00	3.41	161.92	1395.84	8.75	-6.07	8.07	1.85	10.10	126.96
1492.00	5.19	159.14	1491.57	15.93	-12.84	10 50	1.87	16.59	140.73
1587.00	7.21	156.46	1586.01	26.19	-22.32	14.41	2.15	26.57	147.15
1682.00	8.51	155.25	1680.11	39.18	-34.17	19.74	1.38	39.46	149.99
1778.00	9 94	158.14	1774.87	54.56	-48.32	25 80	1.57	54.77	151.90
1873.00	9 56	157.67	1868.50	70.65	-63.22	31.85	0.41	70.79	153.26
1968.00	10.53	159.64	1962.04	87.21	-78.66	37.86	1.08	87.30	154.30
2064.00	9 83	160.07	2056.53	104.15	-94.59	43.71	0.73	104.20	155.20
2159.00	9.69	160.58	2150.15	120.23	-109.75	49.13	0.17	120.25	155.88
2255.00	10 79	160.25	2244.62	137.26	-125.83	54.86	1.15	137.27	156.45
2350.00	10.78	156.23	2337.95	155.02	-142.33	61.44	0.79	155.02	156.65
2445.00	10.67	156.45	2431.29	172.70	-158.52	68.54	0.12	172.70	156.62
2540.00	10.54	155.44	2524.66	190.18	-174.49	75.66	0.24	190.18	156.56
2604.00	10.43	156.37	2587.60	201.82	-185.12	80.42	0.32	201.83	156.52
2699.00	8.58	156.51	2681.29	217.51	-199.50	86.69	1.95	217.52	156.51
2794.00	7.39	158.65	2775.36	230.71	-211.69	91.74	1.29	230.71	156.57
2889.00	5.58	158.12	2869.75	241 43	-221.66	95.68	1.91	241.43	156.65
2984.00	4.30	167.04	2964.40	249.55	-229.42	98.20	1.57	249.55	156.83
3080.00	2.86	157 16	3060.21	255.49	-235.14	99.94	1.63	255.49	156.97
3175.00	1.50	150.04	3155.14	259.10	-238.40	101.48	1.46	259.10	156.94
3270.00	0.67	256.00	3250 13	260.24	-239.61	101.56	1.90	260.24	157.03
3365.00	0.82	280 00	3345.12	259.79	-239.63	100.35	0.36	259.79	157.28
3460.00	0.48	176.03	3440.12	259.79	-239.90	99.71	1.10	259 80	157.43
3556.00	0.51	181.08	3536.11	260 56	-240.73	99.73	0.06	260.57	157.50
3651.00	0.65	173.19	3631.11	261.46	-241.69	99.79	0.17	261.48	157.57
3746.00	0.67	157.21	3726.10	262.54	-242.74	100.07	0.19	262.55	157.60
3841.00	0.59	154.21	3821.10	263.58	-243.69	100.50	0.09	263.60	157 59
3936.00	0.24	309.36	3916.09	263.89	-244.00	100.55	0.86	263 91	157.60
4031.00	0.30	302.31	4011 09	263.51	-243.74	100.19	0.07	263.53	157.66
4126.00	0.45	322.60	4106.09	262.95	-243.32	99.75	0.21	262.97	157.71
4222.00	1.06	337.45	4202.08	261.69	-242.20	99.18	0.66	261.72	157.73
4317.00	0.86	37.93	4297.07	260.47	-240.82	99.29	1.03	260.49	157.59
4412.00	0.59	7.90	4392.06	259.70	-239.78	99.79	0.48	259.71	157.40
4507.00	1.14	0.19	4487.05	258.42	-238.35	99.86	0.59	258.42	157.27
4602.00	1 01	346 16	4582.04	256.72	-236.59	99.66	0.31	256.72	157.16
4667.00	1.10	18.68	4647.03	255.69	-235.44	99.73	0.92	255.69	157.04
4729.00	0.53	71.05	4709.02	255.27	-234.78	100.19	1.42	255.27	156.89
4824.00	0.28	38.14	4804.02	255.19	-234 46	100.75	0.35	255.19	156.75
4920.00	0.71	12.94	4900.01	254.59	-233.69	101.03	0.49	254.60	156.62
5015.00	1.19	5.48	4995.00	253.25	-232.14	101.25	0.52	253.26	156.43
5110.00	0.82	20.33	5089.99	251.89	-230.52	101.58	0.47	251.91	156.22
5206.00	0.28	132.80	5185.98	251.60	-230.03	101.99	1.00	251.63	156.09
5301.00	0.54	23.07	5280.98	251.51	-229.78	102.34	0.72	251.54	155.99
5396.00	0.34	49.15	5375.98	251.11	-229.18	102.73	0.29	251.15	155.86
5491.00	1.12	153 76	5470.97	251.95	-229.83	103.35	1.32	252.00	155.79
5586.00	2.14	189.33	5565.94	254.38	-232.42	103.47	1.46	254.41	156.00

Scientific Drilling International
Survey Report

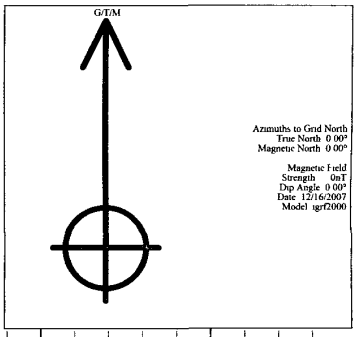
Company:	MACK ENERGY	**Date:** 12/16/2007	**Time:** 19:33:59	**Page:**	2
Field:	Chalk Bluff	**Co-ordinate(NE) Reference:**	Site: Eddy County, NM, Grid North		
Site:	Eddy County, NM	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	State H #2	**Section (VS) Reference:**	Well (0 00N,0.00E,156.92Azi)		
Wellpath:	DH - Job #32D11071006	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

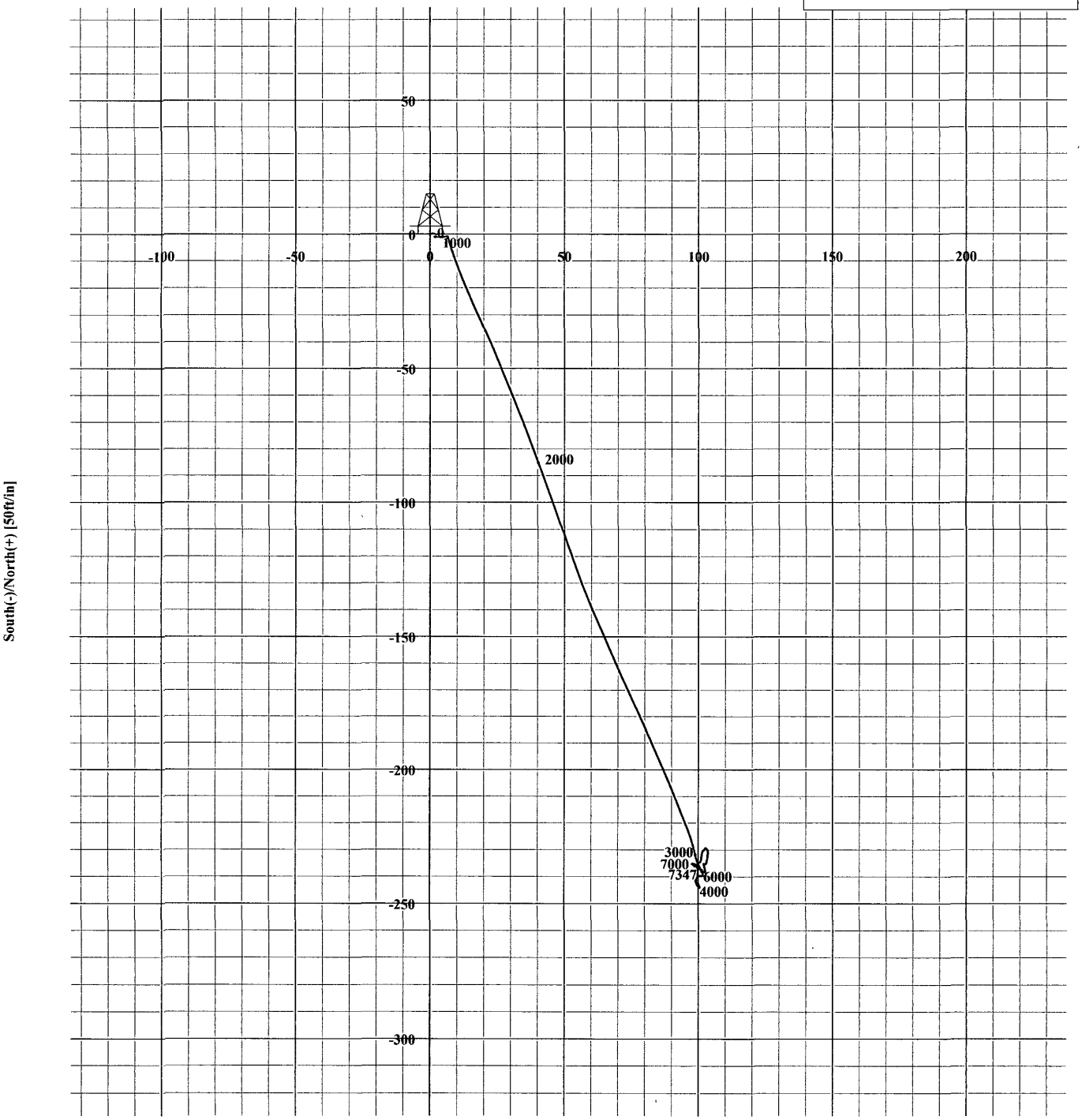
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
5681.00	1.09	194.79	5660.90	256.59	-235.04	102.96	1.12	256.60	156.34
5745.00	0.67	318.43	5724.89	256.71	-235.35	102.55	2.44	256.72	156.45
5839.00	0.24	221.30	5818.89	256.28	-235.08	102.06	0.79	256.28	156.53
5935.00	1.41	161.10	5914.88	257.54	-236.35	102.31	1.36	257.55	156.59
5998.00	1.01	182.35	5977.87	258 82	-237.64	102.54	0.94	258.82	156.66
6093.00	0.20	294.46	6072.86	259.45	-238.41	102.35	1.16	259.45	156.77
6189.00	0.34	306.99	6168.86	259.08	-238.17	101.97	0.16	259.08	156.82
6284.00	0.45	287.60	6263.86	258.59	-237 89	101.39	0.18	258.59	156.92
6379.00	1.01	331.75	6358.85	257.51	-237.04	100.64	0.79	257.51	157.00
6474.00	0.11	334 85	6453.84	256.59	-236.22	100.20	0.95	256.59	157.01
6570 00	0.15	314.50	6549.84	256.38	-236.04	100.07	0.06	256.38	157.02
6665.00	0.27	304.58	6644.84	256.08	-235.83	99.80	0.13	256.08	157.06
6760.00	0.45	295.56	6739.84	255.61	-235.54	99.28	0.20	255.61	157.14
6855.00	0.46	296.68	6834.84	255 04	-235.21	98.60	0.01	255.04	157.26
6950.00	0 51	281.73	6929.83	254.50	-234.95	97.85	0.14	254.51	157.39
7046.00	1.09	134.41	7025.83	255.10	-235.50	98.08	1.61	255.11	157.39
7140.00	0.38	89.52	7119.82	256.05	-236.13	99.03	0.92	256.05	157.25
7235.00	0.57	122.42	7214.82	256.56	-236.38	99.75	0.34	256.56	157.12
7330.00	0.81	125.40	7309.81	257.52	-237.02	100.69	0.26	257.52	156.98
7367.00	0.87	128 12	7346.81	257.99	-237.35	101.13	0.19	257.99	156.92

Scientific Drilling

Field: Chalk Bluff
Site: Eddy County, NM
Well: State H #2
Wellpath: DH - Job #32D11071006
Survey: 11/05/07-11/14/07





Wilson, Kimberly M, EMNRD

From: Jerry Sherrell [jerrys@mackenergycorp.com]
Sent: Wednesday, March 05, 2008 3:37 PM
To: Wilson, Kimberly M, EMNRD
Subject: FW: Financial Assurance/Rule 40- Mack
Importance: High

From: Altomare, Mikal, EMNRD [mailto:Mikal.Altomare@state.nm.us]
Sent: Tuesday, March 04, 2008 11:03 AM
To: Mull, Donna, EMNRD
Cc: Rebecca Groh; Jerry Sherrell; Phillips, Dorothy, EMNRD
Subject: Financial Assurance/Rule 40- Mack
Importance: High

Donna –
I have received a pdf version of what appears to be a properly and fully executed single well bond for the state h no. 001, 03-015-00745, which Mack has assured me that they are over-nighting to our office. Everything appears to be in order, and I expect that, upon receipt of the original in our office, it will be reviewed and accepted and Mack will no longer be listed as being out of compliance with financial assurance requirements. That being said, and given that Mack has posted all other necessary financial assurances for all other properties, if there are no other violations or issues with approval of pending Mack applications, consider them to be in compliance for purposes of pending permit applications with your office.
Please contact me if you have any questions.
Thanks,
Mikal

Mikal M. Altomare
Assistant General Counsel
Oil Conservation Division
Energy, Minerals & Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505
Tel 505.476.3480 ~ Fax 505.476.3462
mikal.altomare@state.nm.us

Submit 3 Copies To Appropriate District Office
District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W Grand Ave, Artesia, NM 8821 0
District III
1 000 Rio Brazos Rd, Aztec, NM 8741 0
District IV
1220 S. St. Francis Dr, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Record Clean up

Form C-103
June 19, 2008

WELL API NO. 30-015-35814	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No. B-9391	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR, USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)	7. Lease Name or Unit Agreement Name State H
1. Type of Well: Oil Well ☒ Gas Well ☐ Other	8. Well Number 2
2. Name of Operator Mack Energy Corporation	9. OGRID Number 013837
3 Address of Operator P.O. Box 960 Artesia, NM 88210	10. Pool Name or Wildcat Red Lake; Glorieta-Yeso NE
4. Well Location Unit Letter H 2063 feet from the North line and 441 feet from the East line Section 2 Township 18S Range 27E NMPM County Eddy	
11. Elevation (Show *whether DR, RKB, RT, GR etc*) 3590' GR	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIALWORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: ☐		OTHER: Workover	☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

2/12/2008 Perforated 3790.5-4025.5', 54 holes.
2/13/2008 Acidized w/ 2,500 gals 15% NEFE Acid.
2/20/2008 Frac w/ 20,156# White Sand 16/30, 13,828# Siber Prop 16/30, 36,414 gals 40# gel.
2/21/2008 Perforated 3364-3677', 72 holes.
2/22/2008 Acidized w/ 2,500 gals 15% NEFE Acid.
2/25/2008 Frac w/ 8,000# LiteProp 125 14/30, 73,600# White Sand 16/30, 15,380# Siber Prop 16/30, 85,000 gals 40# Linear Gel.
2/27/2008 RIH w/ 134jts 2 7/8" J-55 6.5# tubing, SN @ 4243', 2 1/2 x 2 x 20' pump.

RECEIVED
SEP 20 2012
NMOCD ARTESIA

Spud Date: 10/31/2007 Rig Release Date: 11/22/2007

I hereby certify that the information above is true slid complete to the best of my knowledge and belief.

SIGNATURE Deana Weaver TITLE Production Clerk DATE 9.18.12

Type or print name Deana Weaver E-mail address: dweaver@mec.com PHONE: (575)748-1288

For State Use Only

APPROVED BY: RWade TITLE Dist II Supervisor DATE 9/26/12

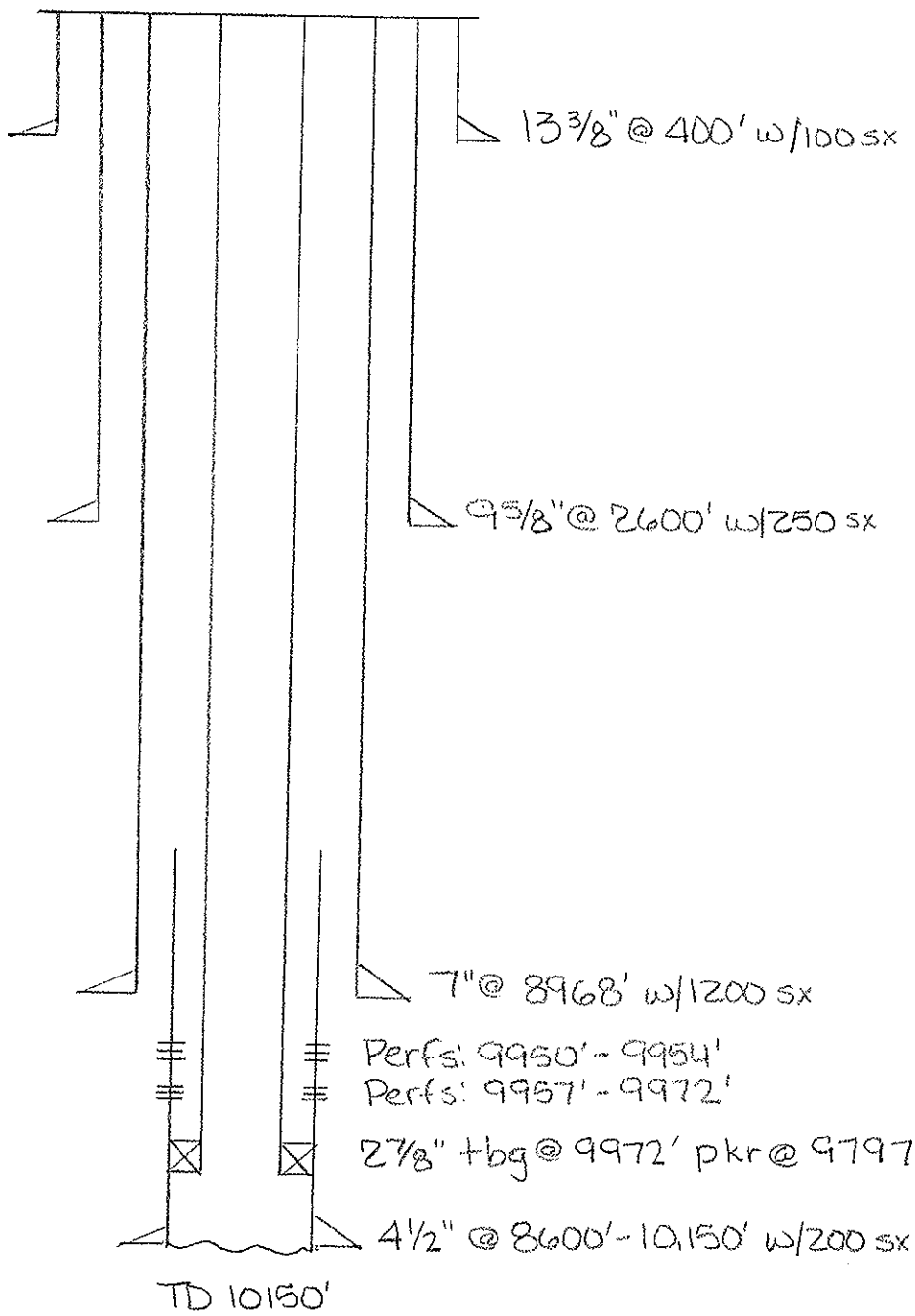
Conditions of Approval (if any):

SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 74
Artificial Penetration Review

OPERATOR	Mewbourne Oil Co.	**STATUS**	Active Gas
LEASE	Chalk Bluff Fed	**LOCATION**	Sec. 1 -T18S-R27E
WELL NUMBER	Com 003	**MUD FILLED BOREHOLE**	NA
DRILLED	11-24-92	**TOP OF INJECTION ZONE**	7345'
PLUGGED	NA	**API NO.**	30-015- 27163

REMARKS: Calc. Top of Cement behind 7" @ 910'



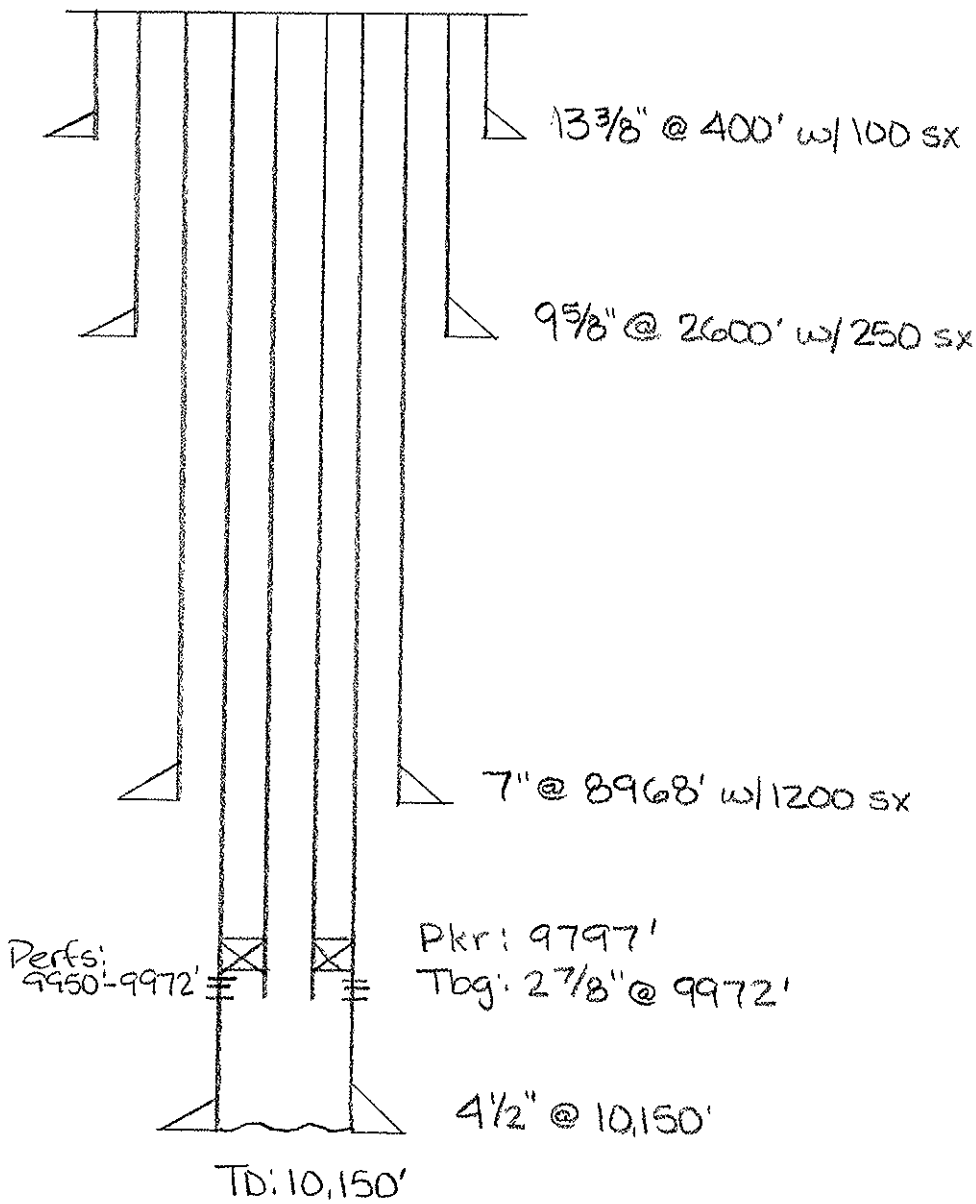
SUBSURFACE

NAVAJO REFINING COMPANY, L.L.C.
Map ID No. 99
Artificial Penetration Review

OPERATOR Newbourne Oil
LEASE Chalk Bluff Federal
WELL NUMBER 3
DRILLED 1/16/93
PLUGGED NA

STATUS Active
LOCATION Sec. 1 -T 18S-R 27E
MUD FILLED BOREHOLE NA
TOP INJECTION ZONE -3702'
API NO. 30-015- 27163

REMARKS:



MAP ID NO. 99

MEWBOURNE OIL CO.
CHALK BLUFF FEDERAL COM NO. 003

API NO. 30-015-27163

APD ATTATCHMENT

Mewbourne Oil Company Chalk Bluff Federal Comm. #3 NM-016788
1980' FSL & 990' FEL Sec. 1-T18S-R27E Eddy County, NM.

1.) Casing Design and Safety Factors (See schedule 1 for used casing design program.)

2.) Cement Program for Casing Strings.

Surface Casing:
250 sacks of Class "C" containing 2% $CaCL_2$ + 1/4#/sack of cellophane flakes followed by 200 sacks of Class "C" containing 3% $CaCL_2$.

Intermediate Casing:
700 sacks of Class "C" containing 6% gel + 2% $CaCL_2$ + 1/2#/sack of cellophane flakes + 5#/sack of Gilsonite followed by 200 sacks of CLass "C" containing 3% $CaCL_2$

Production Casing:
A cement diverter tool (D. V. Tool) will be run at a depth of approximately 7500' from surface.
1st Stage:
850 sacks of Class "H" containing 5#/sack KCL + .7% fluid loss additive + 5#/sack compressive strength extender.
2nd Stage:
900 sacks of Class "C" Lite containing 1/2#/sack cellophane flakes + 5#/sack Gilsonite + .4% fluid loss extender followed by 100 sacks of Class "H" containing .4% fluid loss additive + 5#/sack compressive strength extender.

3.) Drilling time will require approximately 35 - 40 days and drilling operations should begin approximately November 1, 1992.

4.) The possibility of encountering H_2S gas in this area remote. Mewbourne Oil Company has drilled offset wells to this proposed location and none of these wells have encountered any H_2S gas in the Pennsylvanian. In the event H_2S is encountered, the necessary H_2S safety equipment will be installed on location to provide for a safe working enviroment.

5.) Anticipated formation temperature and pressure in the Morrow zone will be approximately 155 degrees fahrenheit and 3,000# psi.

6.) This location is a non-standard location. A hearing is scheduled for October 15, 1992 in Santa Fe, New Mexico before the New Mexico Oil Conservation Division for an unorthodox location exception.

7.) The pressure rating on the BOP STACK (see exhibit "D" of the APD) is 3,000# psi. The correct pressure rating of ANSI 900 series is noted in the APD. The API standard for pressure ratings for flanged equipment is in ANSI series. ANSI 600 series is 2,000# psi working pressue test, ANSI 900 series is 3,000# psi working pressure, ANSI 1500 series is 5,000# psi work-pressure.

SCHEDULE ONE

LEASE NAME: CHALK BLUFF FEDERAL #3 **TYPE OF CSG STRING:** PRODUCTION

LEGALS: SEC 1-18S-27E **DEPTH OF CSG:** 10,300

CASING MINIMUM PERFORMANCE PROPERTIES

	CSG TYPE	K-FACTOR	COLLAPSE	BURST	TENSION
1	5 1/2" 20# N-80 LT&C	991,000	8830	9190	428000
2	5 1/2" 17# N-80 LT&C	844,000	6380	7740	348000
3	5 1/2" 20# N-80 LT&C	991,000	8830	9190	428000
4					
5					

GRADE OF CASING: 85 % OF NEW

	CSG TYPE	COLLAPSE	BURST	TENSION
1	5 1/2" 20# N-80 LT&C	7506	7812	363800
2	5 1/2" 17# N-80 LT&C	5423	6579	295800
3	5 1/2" 20# N-80 LT&C	7506	7812	363800
4	0	0	0	0
5	0	0	0	0

SETTING DEPTH (WT. OF CSG IN AIR)

	FROM	TO	CASING WT. (LB/FT)	INTERVAL LGTH (FT.)	INTERVAL WT. (LBS)	CUMMULATIVE WT. (LBS)
1	0	1,000	20	1000	20,000	181,100
2	1,000	9,300	17	8300	141,100	161,100
3	9,300	10,300	20	1000	20,000	20,000
4	0			0	0	0
5	0			0	0	0

WELLBORE CONDITIONS

MUD WEIGHT: 9.6 PPG

BOUYANCY FACTOR 0.853 (AIR = 1)

DISPLACEMENT FLUID WT: 8.5 PPG

	DEPTH	ANNULAR HYDROSTATIC PRESSURE	COLLAPSE W/AXIAL LOADING	HOLE HYDROSTATIC PRESSURE	TENSION
	0	0		0	154,478
1	1000	499	5982	442	137,418
2	9300	4643	5290	4111	17,060
3	10300	5142	7506	4553	0
4	0	0	ERR	0	0
5	0	0	ERR	0	0

FINIAL CASING DESIGN **SAFTEY FACTORS**

		FROM	TO	LENGTH	COLLAPSE >1.125	BURST >1.00	TENSION >2.00
0		0	0	0	ERR	ERR	ERR
0		0	0	0	ERR	ERR	ERR
5	1/2" 20# N-80 LT&C	10,300	9,300	1000	1.460	1.716	21.325
5	1/2" 17# N-80 LT&C	9,300	1,000	8300	1.139	1.600	2.153
5	1/2" 20# N-80 LT&C	1,000	0	1000	11.983	17.673	2.355

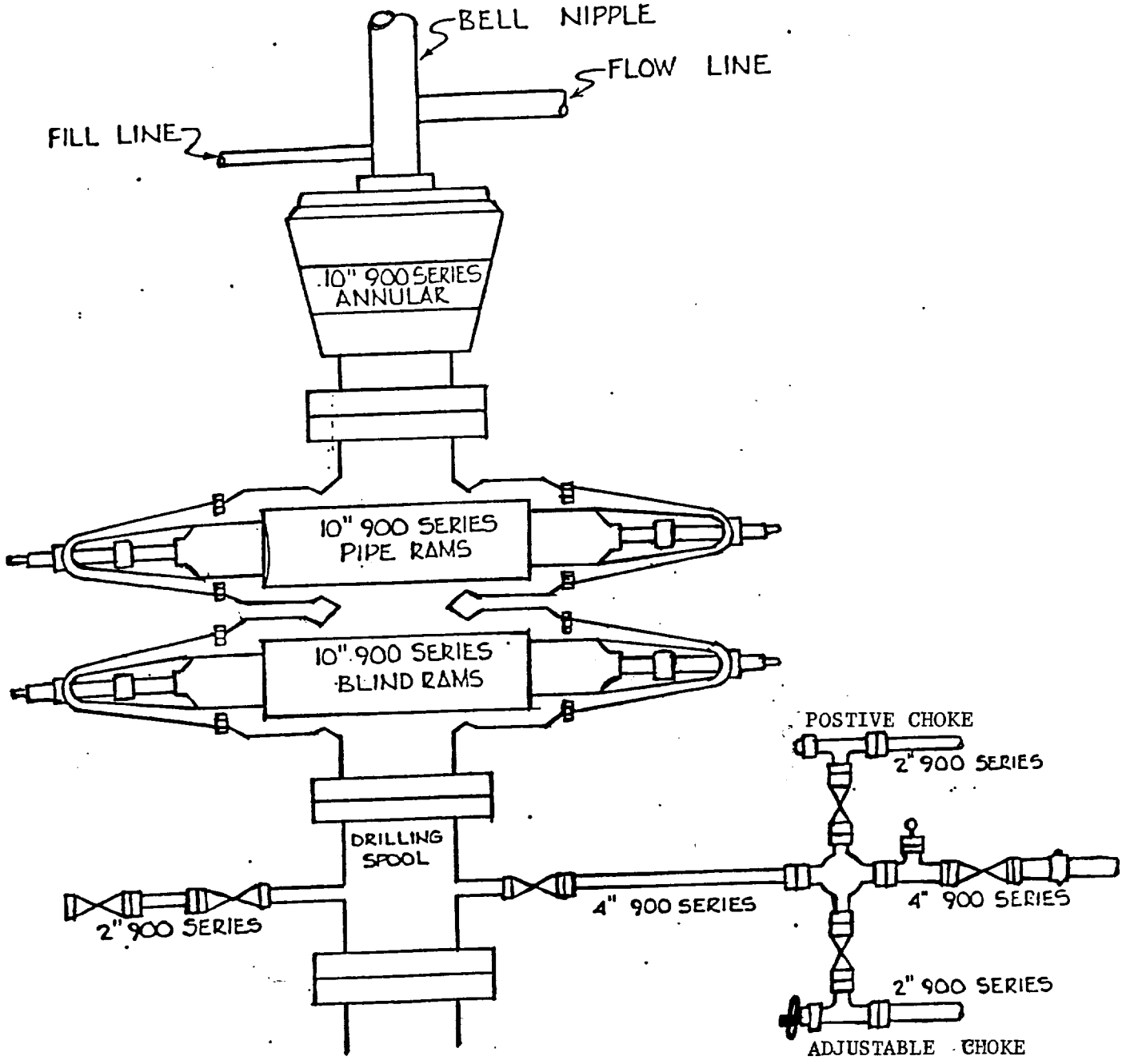
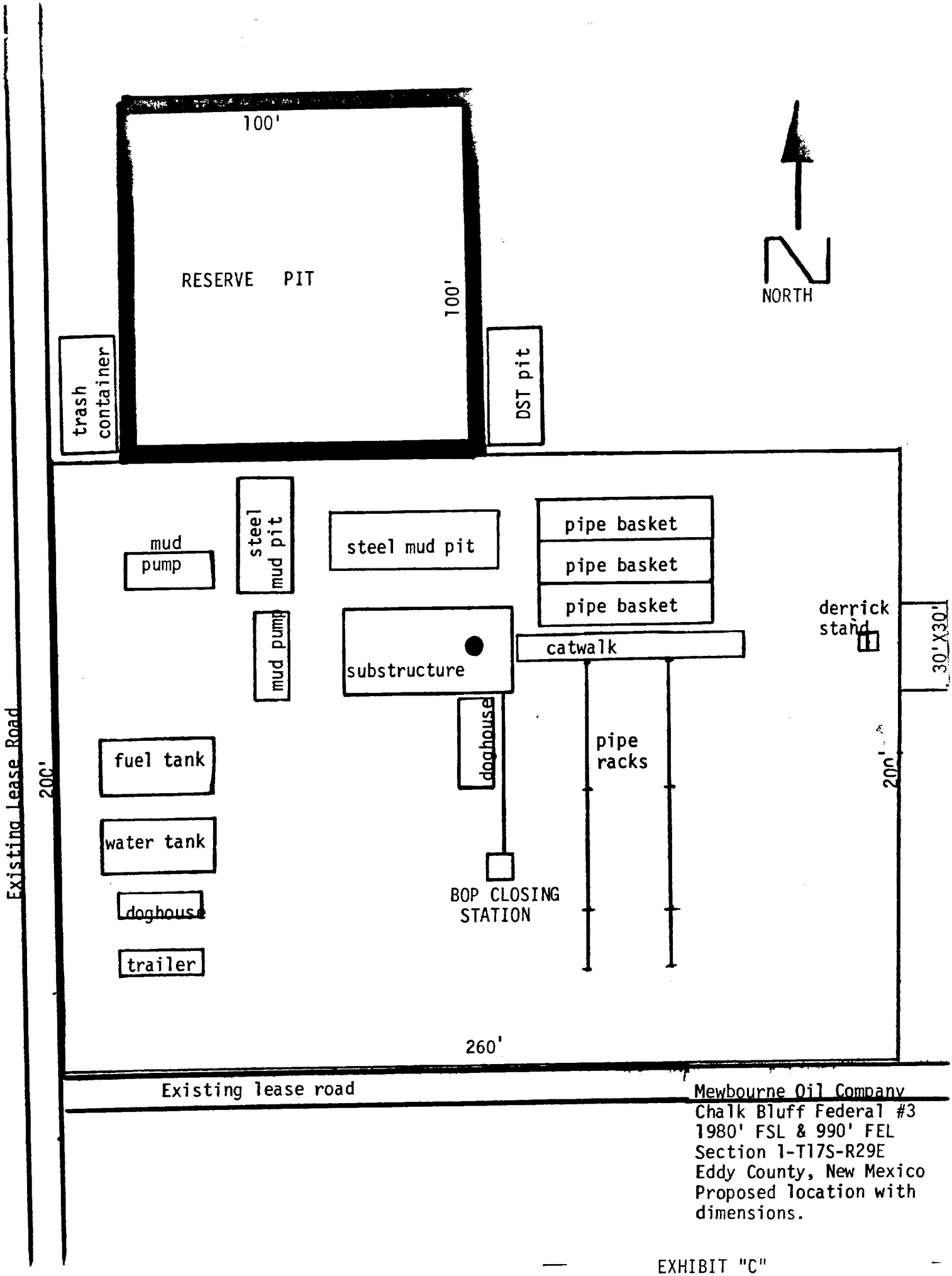


EXHIBIT "D"

Mewbourne Oil Company
Chalk Bluff Federal #3
1980' FSL & 990' FEL
Section 1-T17S-R29E
Eddy County, New Mexico



Mewbourne Oil Company
Chalk Bluff Federal #3
1980' FSL & 990' FEL
Section 1-T17S-R29E
Eddy County, New Mexico
Proposed location with dimensions.

EXHIBIT "C"

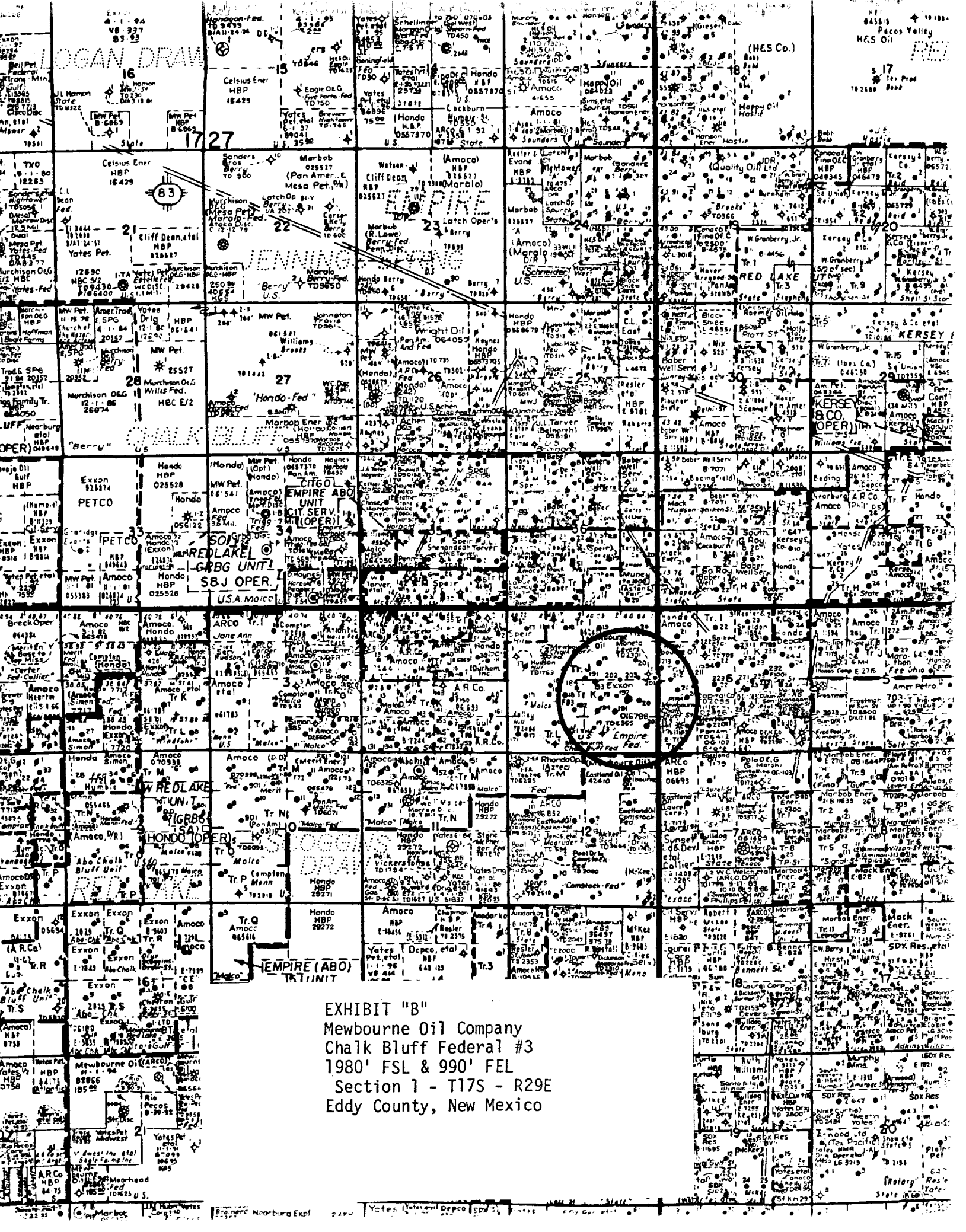


EXHIBIT "B"
Mewbourne Oil Company
Chalk Bluff Federal #3
1980' FSL & 990' FEL
Section 1 - T17S - R29E
Eddy County, New Mexico

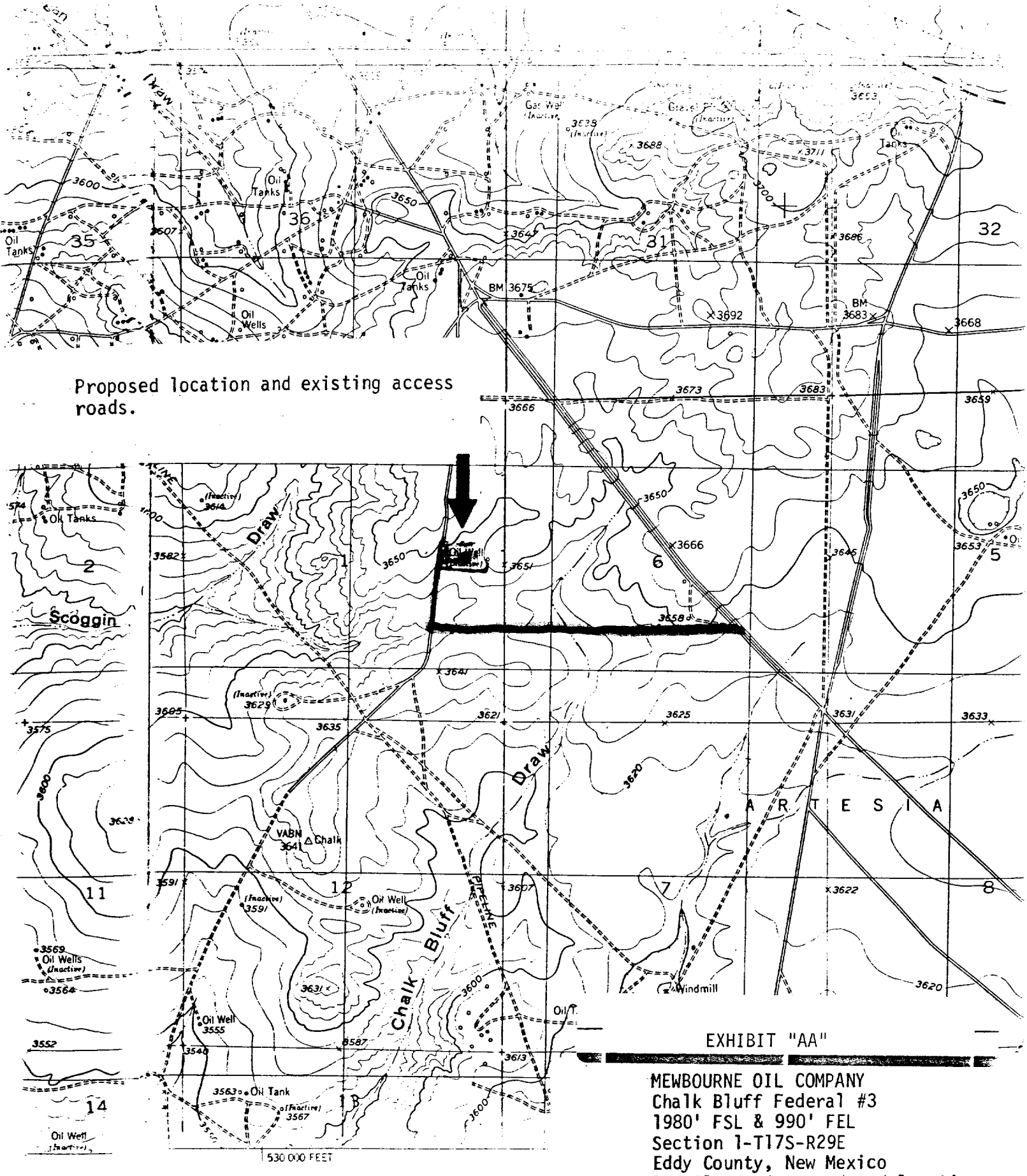


EXHIBIT "AA"

[redacted]

MEWBOURNE OIL COMPANY
Chalk Bluff Federal #3
1980' FSL & 990' FEL
Section 1-T17S-R29E
Eddy County, New Mexico
Detail Map for road and location.

Existing Roads [redacted]

Proposed Location

ped, edited ... ished by the Geological Survey

ol by USGS ... GS

re and dra... 1946. T... planimetric surveys 1955

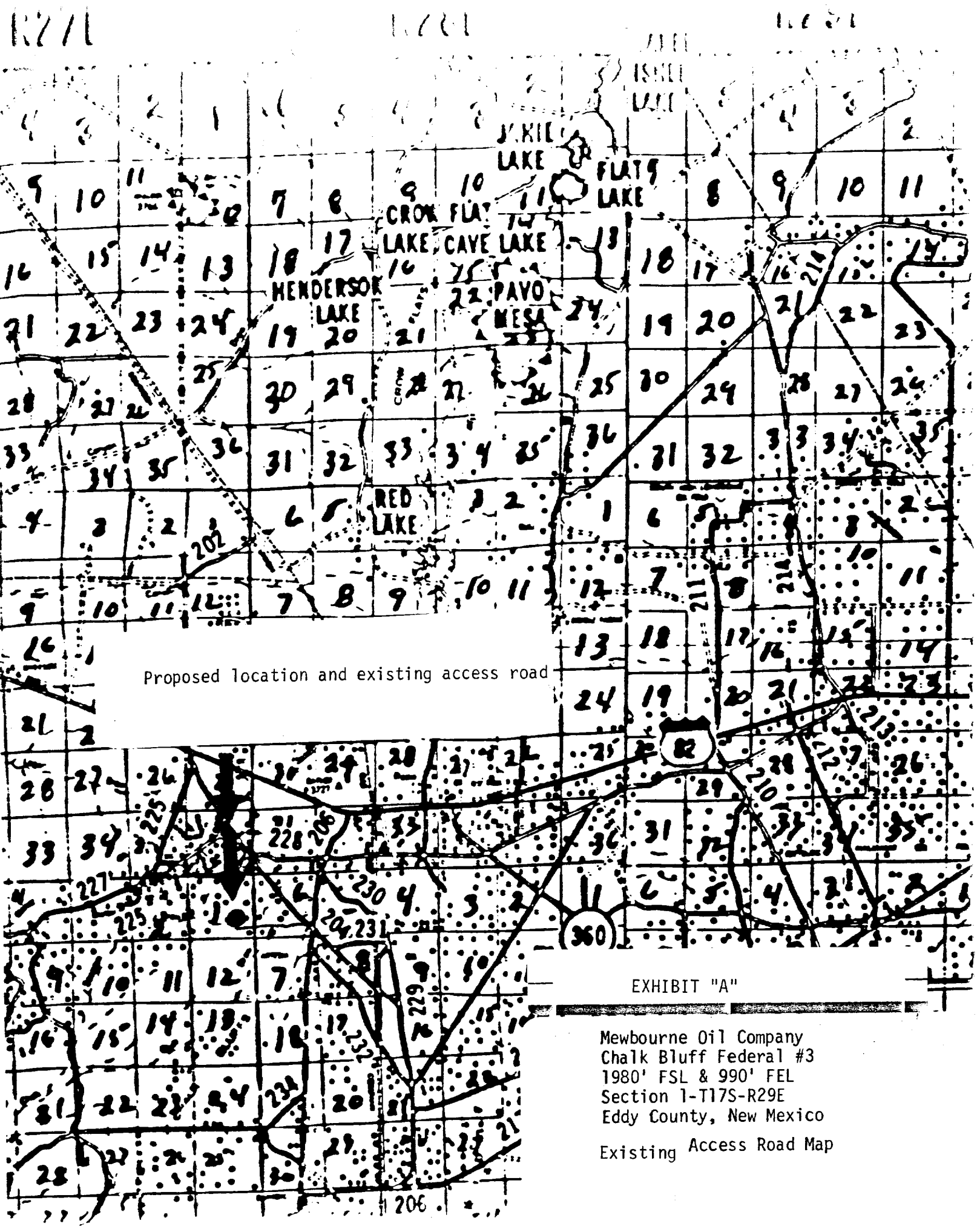


EXHIBIT "A"

Mewbourne Oil Company
Chalk Bluff Federal #3
1980' FSL & 990' FEL
Section 1-T17S-R29E
Eddy County, New Mexico

Existing Access Road Map

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised 1-1-89

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
MEWBOURNE OIL COMPANY	CHALK BLUFF FEDERAL	3

Unit Letter	Section	Township	Range	County
I	1	18 SOUTH	27 EAST NMPM	EDDY

Actual Footage Location of Well: 1980 feet from the SOUTH line and 990 feet from the EAST line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3628	Morrow	North Illinois Camp Morrow	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

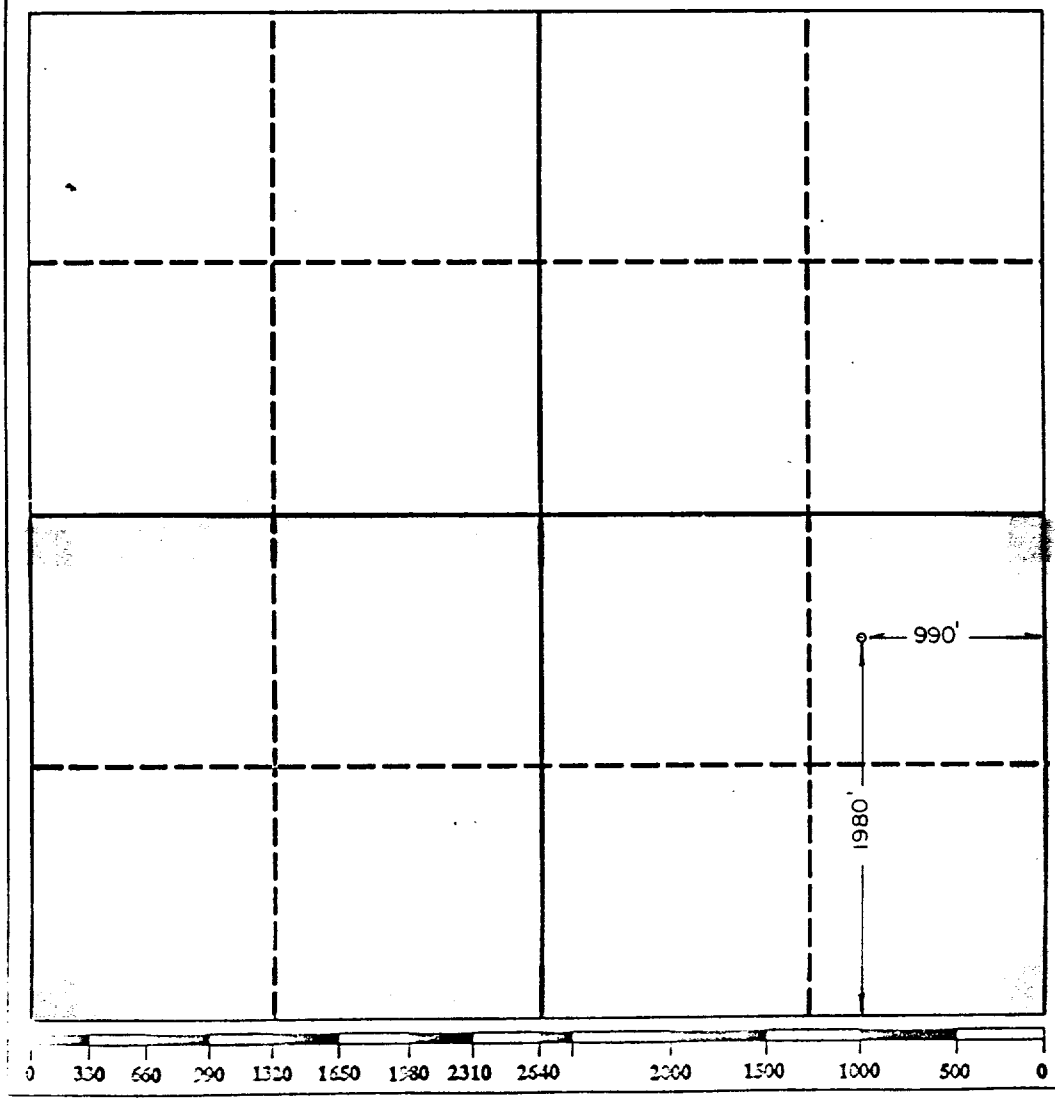
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

[XX] Yes [ ] No If answer is "yes" type of consolidation Communitization

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary. _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein in true and complete to the best of my knowledge and belief.

Signature: Bill Pierce

Printed Name: Bill Pierce

Position: Drilling Superintendent

Company: Mewbourne Oil Company

Date: August 31, 1992

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: 8/26/92

Signature & Seal of Professional Surveyor: STATE OF NEW MEXICO HERSCHEL L JONES TEXAS

Certificate No. 3640

12. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drilling site and necessary access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by MEWBOURNE OIL COMPANY and its' contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

September 9, 1992

Kelly Ryan
District Superintendent
MEWBOURNE OIL COMPANY

C. The estimated depths at which anticipated water, oil or natural gas can be expected are:

Water: Possible surface water between 100' - 300'.
Oil: Penrose @ 1520'
Gas: Wolfcamp @ 6900'

D. Proposed Casing Program: See Form 3160-3

E. Pressure Control Equipment: See Form 3160-3 and Exhibit "D".

F. Mud Program: See Form 3160-3.

G. Auxiliary Equipment: Mud-gas seperator, PVT system, and Hydraulic choke from 6,000' to T.D.

H. Testing and Coring Program: Possibility of 4 DST's in the following zones: Wolfcamp, Cisco, Strawn, Morrow. No cores are planned at this time.

I. Logging: Gamma Ray - Spectral Density Dual Spaced Neutron Log from T.D. to surface.
Gamma Ray - Dual LaterLog - Micro Guard Log from T. D. to Intermediate casing.

J. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to accomodate the increased pressures.

K. Anticipated Starting Date: As soon as possible after BLM approval.

11. <u>OPERATOR'S REPRESENTATIVES:</u>

The field representatives responsible for assuring compliance with the approved surface use and operations plan are as follows:

Kelly Ryan	(505) 393-5905	Box 5270
Bill Pierce	24. hour aswering	Hobbs, NM
Greg Milner	service.	88241

7. ANCILLARY FACILITIES:

A. None required.

8. WELLSITE LAYOUT:

A. Exhibit "C" shows the relative location and dimensions of the well pad, mud pits, reserve pits, trash container and location of major rig components.

B. A 400' X 400' area has been flagged surround- the staked well.

9. PLANS AND RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations, all equipment not needed for producing operations will be removed. Pits will be filled in after all fluids have evaporated and the location cleaned of all trash and junk to leave the wellsite in an asthetically pleasing condition as reasonably possible. All production facilities left on location will be painted to conform with BLM painting regulations within 120 days of completion.

10. OTHER INFORMATION:

A. The geologic surface formation is hard clay interspersed with sand and chert outcroppings. Vegatative covering is generally sparse except in low-lying areas where grass is prevelant. Other vegatative covering consists mostly of greasewood and bear grass.

B. The estimated tops of geologic markers are as follows:

Queen	1260'	Cisco	7740'
San Andres	2100'	Canyon	8350'
Glorieta	3720'	Strawn	8900'
Tubb	4930'	Atoka	9500'
Abo	5900'	Morrow	9600'
Wolfcamp	6900'	Miss.	10,100'

4. LOCATION AND TYPE OF WATER SUPPLY:

A. Water will be purchased from trucking companies servicing this area and will be trucked to the wellsite over existing and/or proposed roads shown on Exhibits "A" and "AA".

5. LOCATION OF CONSTRUCTION MATERIALS:

A. Caliche for construction of the location and any needed road repairs hopefully will come from the location itself. If this is not possible, caliche will be taken from a BLM pit located in the NE4/NW4 of Sec. 12-T18S-R27E which is BLM pit #18271203. This pit also extends into the SE4/SW4 of Sec. 1-T18S-R27E which is BLM pit # 18270114. An alternative pit which may be used in the event BLM pit #18271203 contains unsuitable material is a BLM pit located in the SW4/NE4 of Sec. 1-T18S-R27E which is BLM pit #18270107.

6. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.

C. Water used and produced during stimulation, production testing, squeezing opeations etc. will be disposed of in the drilling pits. Oil produced during tests will be stored on site in steel test tanks until sold.

D. Current laws and regulations pertaining to the disposal of human waste will be complied with.

E. All trash, junk and other waste material will be contained in an appropriate container to prevent scattering and will be removed and deposited in an approved sanitary landfill.

F. All trash and debris will be buried or removed from the wellsite within 90 days after drilling and/or completion operations have ceased.

MULTI-POINT SURFACE USE AND OPERATING PLAN
MEWBOURNE OIL COMPANY
CHALK BLUFF FEDERAL WELL NO. 3
1980' FSL & 990' FEL OF SEC. 1-T18S-R30E
EDDY COUNTY, NEW MEXICO
NEW MEXICO LEASE NO. NM-016788

This plan is submitted with the Application for Permit to Drill (APD) the above captioned well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities, operations plan and the magnitude of necessary surface disturbance involved, so that a complete, comprehensive appraisal can be made as to the enviromental effects associated with this operation. The surface is owned by the Federal Government and is managed by the Bureau of Land Management.

1. EXISTING ROADS:
   A. From the junction of U. S. 82 and U. S. 285 Highways in Artesia, proceed east on U. S. 82 12 miles. Turn right (south) on Eddy County Road #206 (Illinois Camp Road) and proceed south for 1.75 miles. Turn right (northwest) on Eddy County Road #204 and proceed .75 miles. Turn left (west) on caliche lease road and proceed 1 mile. Turn right (north) 100 yards on caliche lease road and location will be on the right hand side of the lease road. (Exhibit "A" & "AA")

   B. Culverts: None required

   C. Cuts and Fills: A two foot cut will be required to construct the location.

   D. Turn-Outs: None required.

   E. Gates or Cattleguards: None required.

2. LOCATION OF EXISTING WELLS

   A. Existing wells in a 1 mile radius are shown on Exhibit "B".

3. LOCATION OF PROPOSED ACTIVITIES:

   A. If the well is productive, all production facilities will be constructed on the existing pad.

Form 3160-3
(November 1983)
(formerly 9-331C)

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

30-015-27163

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.: NM-~~016788~~ 0557371

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL XXX DEEPEN ☐ PLUG BACK ☐

7. UNIT AGREEMENT NAME:

b. TYPE OF WELL: OIL WELL ☐ GAS WELL [X] OTHER SINGLE ZONE [X] MULTIPLE ZONE ☐

8. FARM OR LEASE NAME: Chalk Bluff Fed. Comm.

2. NAME OF OPERATOR: Mewbourne Oil Company

RECEIVED OCT 19 1992 O. C. D. ARTESIA OFFICE

9. WELL NO.: 3

3. ADDRESS OF OPERATOR: Box 5270 Hobbs, New Mexico 88241

10. FIELD AND POOL, OR WILDCAT: North Illinois Camp Morrow

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FSL and 990' FEL
At proposed prod. zone: Same

Unit I

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 1-T~~17S~~ 18S ~~R29E~~ 27E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 12 miles southeast of Artesia, New Mexico

12. COUNTY OR PARISH: Eddy 13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 990'

16. NO. OF ACRES IN LEASE: 320

17. NO. OF ACRES ASSIGNED TO THIS WELL: 320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 2040'

19. PROPOSED DEPTH: 10,300'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3628' GR

22. APPROX. DATE WORK WILL START*: Upon BLM approval

23. PROPOSED CASING AND CEMENTING PROGRAM

No Water Basin

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	61#	400' ±	450 sks. Class C circulated
12 1/4"	9 5/8"	36#	2,600' ±	800 sks. Tie back into surface.
8 3/4"	5 1/2"	17 & 20#	10,300' ±	600 sks. of Class "H" SEE STIPS.

Part ID-1
10-16-92
New Doc + API

Mud Program:

0-400' Spud mud with fresh water gel and lime. LCM as needed.
400' - 2600' Fresh water gel and lime. LCM as needed.
2,600' - 8500' Cut brine with lime for pH control. Wt. 9.2 - 9.6# ppg, WL - NC. LCM as needed.
8,500 - 10.300' Cut brine with Drispac, salt gel, lime, soda ash, and starch. Wt. 9.2 - 9.6 ppg. WL 10 CC or less. Raise weight accordingly if abnormal pressures are encountered.

BOP PROGRAM:

900 series BOP and Hydrill on 13 3/8" surface casing and on 9 5/8" intermediate casing.

Gas is not dedicated.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Kelly Pryor TITLE District Superintendent DATE 09/09/1992

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 10-16-92

CONDITIONS OF APPROVAL, IF ANY:
APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

BUREAU OF LAND MANAGEMENT RECEIVED SEP 10 1992 DIST. 6 N.M. Carlsbad

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

ITEM 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR Part 3160.

PRINCIPAL PURPOSE: The information is to be used to process and evaluate your application for permit to drill, deepen, or plug back an oil or gas well.

ROUTINE USES: (1) The analysis of the applicant's proposal to discover and extract the Federal or Indian resources encountered. (2) The review of procedures and equipment and the projected impact on the land involved. (3) The evaluation of the effects of proposed operation on surface and subsurface water and other environmental impacts. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if the lessee elects to initiate drilling operation on an oil and gas lease.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications.

Response to this request is mandatory only if the lessee elects to initiate drilling operations on an oil and gas lease.

RECEIVED

JAN 04 1993

O. C. D.
ARTESIA, OFFICE

dsf

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

7. If Unit or CA, Agreement Designation

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
Chalk Bluff Federal ~~Comm. #3~~

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
3001527163

3. Address and Telephone No.
P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905

10. Field and Pool, or Exploratory Area
North Illinois Camp Morrow

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & 990' FEL
Sec. 1-T18S-R27E

11. County or Parish, State
Eddy Co., N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
■ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	■ Other Spud well & cemented 13-3/8" surf. csg.	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Spudded well @ 4:00 p.m. MST 11/24/92. Drilled 17-1/2" surface hole to 400' KB. Ran 10 joints of 13-3/8", 54.50#, New LS, ST&C casing and set @ 400' KB. Western cemented w/100 sks. Class "H" cement containing 12% Thixad + 3% CaCl2 followed by 265 sks. of Class "C" containing 6% Gel + 3% CaCl2 + 1/4 pps celloseal + 5 pps gilsonite followed by 150 sks. of Class "C" neet containing 3% CaCl2. Circulated 50 sks. of cement to the pit. Job complete @ 5:30 a.m. 11/25/92.

BUREAU OF LAND MANAGEMENT
RECEIVED
DEC 07 1992
CARLSBAD, NEW MEXICO

14. I hereby certify that the foregoing is true and correct

Signed Bill Pierce Title Drilling Supt. Date 12/02/92

(This space for Federal or State office use)

Approved by David R. Glass Title Date
Conditions of approval, if any:

1992

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

SPECIFIC INSTRUCTIONS

Item 4—If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 13—Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE — The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

ROUTINE USES:

(1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.

(2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).

(3) Analyze future applications to drill or modify operations in light of data obtained and methods used.

(4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION — Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et. seq.) requires us to inform you that:

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

*U.S. GPO: 1990-773-016/26019

C/SF

RECEIVED

JAN 04 1993

O. C. D.
ARTESIA, OFFICE

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other
8. Well Name and No.: Chalk Bluff Federal Comm. #3
2. Name of Operator: Mewbourne Oil Company
9. API Well No.: 3001527163
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905
10. Field and Pool, or Exploratory Area: N. Illinois Camp Morrow
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 1980' FSL & ~~1980~~ 660' FEL, Sec. 1-T18S-R27E
11. County or Parish, State: Eddy Co., New Mexico

12. **CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
■ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	■ Other Cement 9-5/8" Inter. Casing	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drilled 12-1/4" Intermediate hole to 2600' KB. Ran 59 joints of 9-5/8", 36#, New LS, ST&C casing and set @ 2600' KB. Western cemented with 590 sacks of Class "C" lite containing 6% gel + 10 pps NaCl + 1/4 pps celloseal followed by 250 sacks of Class "C" containing 2% CaCl2. Circulated 50 sacks of cement to the pit. Job complete @ 11: 50 p.m. 11/29/92.

BUREAU OF LAND MANAGEMENT
RECEIVED
DEC 07 1992
CARLSBAD, NEW MEXICO

14. I hereby certify that the foregoing is true and correct

Signed: Bill Pierce Title: Drilling Supt. Date: 12-02-92

(This space for Federal or State office use)

Approved by: David R. Glass Title: Date:

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

GENERAL INSTRUCTIONS

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Item 13—Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE — The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

ROUTINE USES:

(1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.

(2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).

(3) Analyze future applications to drill or modify operations in light of data obtained and methods used.

(4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION — Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et. seq.) requires us to inform you that:

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

*U.S. GPO: 1990-773-016/26019

95F

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
8. Well Name and No.: Chalk Bluff Fed. Comm. 3
9. API Well No.: 30-015-27163
10. Field and Pool, or Exploratory Area: N. Illinois Camp Morrow
11. County or Parish, State: Eddy

1. Type of Well: ☐ Oil Well ■ Gas Well ☐ Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 1980' FSL & ~~1980'~~ 990' FEL
Sec. 1-T18S-R27E

12. **CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
■ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	■ Other Cement 7" casing	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Lost complete returns @ 7683'. Dry drilled 8-3/4" hole to 8968'. Ran 226 Jts. of 7", 26# & 29#, N-80 & S-95 grade used API casing and set @ 8968'. Multiple stage cementer @ 6997' and external casing packer @ 7026'. Western cemented the first stage w/350 sks. of Class "H" containing 8 pps CSE + .75% CF-14 + 5 pps Gilsonite + .35% Thrifty Lite. Set ECP and opened DV tool. Cemented 2nd stage w/750 sks. of Class "C" containing 1 pps celloseal + 5 pps gilsonite + 3% salt followed by 100 sks. of Class "H" Neet. Plug down to 6997' @ 2:45 a.m. 12/26/92

ACCEPTED FOR RECORD
(ORIG. SGD.) DAVID R. GLASS
FEB 4 1993
CARLSBAD, NEW MEXICO

RECEIVED
JAN 25 9 40 AM '93
CARLSBAD AREA OFFICE

14. I hereby certify that the foregoing is true and correct

Signed: Bill Pierce Title: Drilling Superintendent Date: 01/20/93

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ■ Gas Well ☐ Other

2. Name of Operator
Mewbourne Oil Company

3. Address and Telephone No.
P.O. Box 5270 Hobbs, New Mexico 88241

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & ~~1980'~~ 990' FEL
Sec. 1-T18S-R27E

8. Well Name and No.
Chalk Bluff Fed. Comm. #3

9. API Well No.
30-015-27163

10. Field and Pool, or Exploratory Area
N. Illinois Camp Morrow

11. County or Parish, State
Eddy

12. **CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
■ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	■ Other Run 4-1/2" Liner	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drilled well to a total depth of 10,150' w/6" hole, ran 45 jts. of 4-1/2", 11.6#, N-80, used API casing and hung liner from 8599' to 10,150'. Western cemented w/200 sks. of Class "H" containing 5 pps CSE + 20 pps SF-3 + .9% CF-14 + 1 gal./ 100 sacks of Klay-Treat. Plug down to 10,113' @ 5:00 a.m. 01/06/93. Released rig and moved off location. 01/08/93

ACCEPTED FOR RECORD
(ORIG. SGD.) DAVID R. GLASS
FEB 4 1993

RECEIVED
JAN 25 9 40 AM '93
CARLSBAD AREA OFFICE

14. I hereby certify that the foregoing is true and correct
Signed Bill Pierce Title Drilling Superintendent Date 01/21/93

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

SEC 1 TWN 18 RGE 27 API # 30-015-27163

OPERATOR MEWBOURNE OIL CO

WELL NAME CHALK BLUFF FED COM #3

STATE OCD TOPS AS PER MARK ASHLEY DATE 1-25-93

Southeastern New Mexico				Northwestern New Mexico			
T. Anhy		T. Canyon		T. Ojo Alamo		T. Penn. "B"	
T. Salt		T. Strawn	8932	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt		T. Atoka	9490	T. Pictured Cliffs		T. Penn. "D"	
T. Yates	450	T. Miss		T. Cliff House		T. Leadville	
T. 7 Rivers	565	T. Devonian		T. Menefee		T. Madison	
T. Queen	1159	T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg	1494	T. Montoya		T. Mancos		T. McCracken	
T. San Andres	1985	T. Simpson		T. Gallup		T. Ignacio Otzte	
T. Glorieta	3535	T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T.	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T. Tubb	4760	T. Delaware Sand		T. Todilto		T.	
T. Drinkard		T. Bone Springs		T. Entrada		T.	
T. Abo	5745	T. MORROW LS	9710	T. Wingate		T.	
T. Wolfcamp	6475	T.		T. Chinle		T.	
T. Penn	7970	T.		T. Permain		T.	
T. Cisco (Bough C)		T.		T. Penn "A"		T.	

OIL OR GAS SANDS OR ZONES

No. 1, from ..... to ..... No. 3, from ..... to .....

No. 2, from ..... to ..... No. 4, from ..... to .....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from ..... to ..... feet .....

No. 2, from ..... to ..... feet .....

No. 3, from ..... to ..... feet .....

REMARKS:

Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-104
Revised 1-1-89
See Instructions
at Bottom of Page

RECEIVED
JAN 2 4 1993
O. C. D.
ARTESIA, NEXT

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator	Well API No.
Mewbourne Oil Company	30-015-27163

Address: P.O. Box 5270 Hobbs, New Mexico 88241

Reason(s) for Filing (Check proper box): New Well [X]; Recompletion [ ]; Change in Operator [ ]; Other (Please explain) [ ]

Change in Transporter of: Oil [ ] Dry Gas [ ]; Casinghead Gas [ ] Condensate [ ]

If change of operator give name and address of previous operator _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Chalk Bluff Federal Comm.	3	North Illinois Camp Morrow	State, Federal or Fee	NM-0557371

Location: Unit Letter I : 1980 Feet From The South Line and 990 Feet From The East Line

Section 1 Township 18S Range 27E, NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [ ] or Condensate [X]	Address (Give address to which approved copy of this form is to be sent)
Amoco Pipeline IPC	502 N. West Ave. Levelland, Tx. 79336-3914
Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [X]	Address (Give address to which approved copy of this form is to be sent)
Transwestern Pipeline Company	P.O. Box 1188 Houston, Texas 77251

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When ?
	I	1	18S	27E	Yes	01/15/93

If this production is commingled with that from any other lease or pool, give commingling order number: None

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
		X	X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
11/24/92	01/16/93	10,150'	10,102'
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
KB 3643' DF 3641' GL 3628'	Lower Morrow	9950'	9972'
Perforations			**Depth Casing Shoe**
9950'-9954' 9957'-9972'			10,150'

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17-1/2"	13-3/8" 54.5#	400'±	100 sacks Port ID-2
12-1/4"	9-5/8" 36#	2,600'	250 sacks 2-12-93
8-3/4"	7" 26#	8,968'	1200 sacks comp 4 B/5
6"	4-1/2" Liner 11.6#	8,600' to 10,150'	200 sacks

V. TEST DATA AND REQUEST FOR ALLOWABLE

2-3/8" & 2-7/8"

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas- MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
2000 MCF/D	24 Hrs.	30 : 1	N/A
Testing Method (pitot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
Back Pressure	2850	0	10/64"

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

R. A. Jones

Signature: Robert A Jones — Printed Name
Engineer — Title
01/19/93 — Date
(505) 393-5905 — Telephone No.

OIL CONSERVATION DIVISION

Date Approved JAN 2 9 1993

By ORIGINAL SIGNED BY MIKE WILLIAMS

Title SUPERVISOR, DISTRICT II

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
2) All sections of this form must be filled out for allowable on new and recompleted wells.
3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
4) Separate Form C-104 must be filed for each pool in multiply completed wells.

LTR

Job separation sheet

Form 3160-4
(October 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0137
Expires: December 31, 1991

5. LEASE DESIGNATION AND SERIAL NO.
NM-0557371

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
Chalk Bluff Fed. Comm. #3

9. API WELL NO.
30-015-27163

10. FIELD AND POOL, OR WILDCAT
N. Illinois Camp Morrow

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 1-T18S-R27E

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other

CONFIDENTIAL

2. NAME OF OPERATOR
Mewbourne Oil Company

3. ADDRESS AND TELEPHONE NO.
P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface 1980' FSL & 990' FEL
At top prod. interval reported below
At total depth Same

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: Eddy | 13. STATE: N.M.

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
11/24/92	01/06/93	01/16/93	KB 3643' DF 3641' GL 3628'	3628'

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
10,150'	10,102'		→	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
9950'-9954', 9957'-9972' Lower Morrow Orange Sand

25. WAS DIRECTIONAL SURVEY MADE: Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN
SDL-DSN Dual-Latero-MFSL-GR Sonic CBL

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.5#	400'±	17-1/2"	100 sx. Class "H"	None
9-5/8"	36#	2,600'±	12-1/4"	250 sx. Class "C"	None
7"	26 & 29#	8,968'	8-3/4"	1200 sx. Class "C & H"	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
4-1/2"	8600'	10,150'	200 sxs.	None

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	9972'	9797'
2-3/8"		

31. PERFORATION RECORD (*Interval, size and number*)
9950'-9954' 9957'-9972'
4 SPF 19' 76 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
9950'-9954'	None
9957'-9972'	None

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
01/16/93	Flowing	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
01/16/93	24	10/64"	→	50	2000	0	40 MCF/BBL

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
2720	0	→	60	2000	0	

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)
Sold

TEST WITNESSED BY
R. Jones

35. LIST OF ATTACHMENTS
Logs- * Please hold in confidence

ACCEPTED FOR RECORD
FEB 4 1993

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED R. Gore TITLE Engineer DATE 01/21/93

*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
M. Morrow	9950'	9972'	Sandstone

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Yates	450'	
7 Rivers	564'	
Queen	1159'	
Grayburg	1492'	
San Andres	1985'	
Glorieta	3536'	
Tubb	4760'	
Drinkard	5524'	
Abo	5744'	
Wolfcamp	6474'	
Cisco	7686'	
Canyon	8440'	
Strawn	8932'	
Atoka	9490'	
Morrow	9594'	
Morrow Clastic	9800'	
L. Morrow	9911'	

U.S. GPO:1991-575-735/45086

KEN REYNOLDS—PRESIDENT
ARNIE NEWKIRK—VICE-PRESIDENT

WEK DRILLING CO., INC. — OIL WELL DRILLING CONTRACTORS

P. O. Box 1498 ROSWELL, NEW MEXICO 88202-1498
505/623-5070 ROSWELL, NM
505/746-2719 ARTESIA, NM

January 06,1993

Mewbourne Oil Company
P.O. Box 5270
Hobbs, N.M. 88240

RE: Chalk Bluff Federal #3

The following is a Deviation Survey on the above referenced well located in Eddy County, New Mexico.

400' - 3/4°	5033' - 2 3/4°	5813' - 4°
887' - 1°	5096' - 3°	5875' - 4°
1359' - 1°	5158' - 3°	5967' - 3 3/4°
1864' - 2°	5222' - 3 1/4°	6094' - 3 3/4°
2336' - 1 1/2°	5283' - 3 3/4°	6217' - 3 1/4°
2600' - 3/4°	5346' - 3 3/4°	6720' - 3 1/2°
2792' - 1 1/4°	5409' - 4°	7213' - 3°
3086' - 1°	5464' - 4 1/4°	7685' - 2 1/2°
3580' - 1 1/3°	5555' - 4 1/4°	8155' - 2 1/4°
4079' - 1°	5587' - 4 1/4°	8654' - 2°
4358' - 1 3/4°	5650' - 4 1/4°	9003' - 2°
4846' - 2 3/4°	5719' - 4 1/2°	9509' - 1/4°
		9837' - 3/4°
		10150' - 1 3/4° TD

Sincerely,

Gary W. Chappell
Contracts Manager

STATE OF NEW MEXICO)
)
COUNTY OF CHAVES)

The foregoing was acknowledged before me this 06th day of January 1993 by Gary W. Chappell.

MY COMMISSION EXPIRES

October 07,1996

Linda Rogers
NOTARY PUBLIC

COMPANY :MEWBOURNE OIL LEASE :CHALK BLUFF FED.COMWELL NO. : 3

UNIT :I SECTION : 1 TOWNSHIP : 18

L : 9961 H : 9961 L/H : 1 G/GMIX : 0.849

%CO2 : 0.42 %N2 : 0.33 H2S : DATE :

d : 2.278 Fr :0.012892 GH : 8456.9 RANGE : 27

VOL 1 : 655 PSIA 1 : 2243.2 RESV.TEMP 173.6

VOL 2 : 1310 PSIA 2 : 2193.2

VOL 3 : 2283 PSIA 3 : 2113.2 SHUT-IN PR= 2273.2

VOL 4 : 3294 PSIA 4 : 2013.2

PCR : 668

TCR : 401

	LINE	RATE 1		RATE 2		RATE 3		RATE 4	
		'1ST	'2ND	'1ST	''2ND	'1ST	'2ND	'1ST	'2ND
1	QM	0.655	0.655	1.310	1.310	2.283	2.283	3.294	3.294
2	TW	534	534	534	534	534	534	534	534
3	Ts	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6
4	T	583.8	583.8	583.8	583.8	583.8	583.8	583.8	583.8
	PR (est)	3.36		3.28		3.16		3.01	
5	Z(est)	0.727	0.738	0.727	0.736	0.723	0.733	0.731	0.730
6	TZ	424.5	430.8	424.6	429.5	425.2	427.7	426.5	426.0
7	GH/TZ	19.924	19.629	19.918	19.691	19.891	19.774	19.829	19.852
8	eS	2.111	2.088	2.110	2.093	2.108	2.099	2.104	2.105
9	1-e-S	0.526	0.521	0.526	0.522	0.526	0.524	0.525	0.525
10	Pt	2243.2	2243.2	2193.2	2193.2	2113.2	2113.2	2013.2	2013.2
11	Pt2 /1000	5031.9	5031.9	4810.1	4810.1	4465.6	4465.6	4053.0	4053.0
12	Fr	0.012892	0.012892	0.012892	0.012892	0.012892	0.012892	0.012892	0.0128924
13	Fc=FrTZ	5.472	5.555	5.474	5.537	5.481	5.514	5.498	5.492
14	FcQm	3.58	3.64	7.17	7.25	12.51	12.59	18.11	18.09
15	L/H(FcQm)	12.8	13.2	51.4	52.6	156.6	158.5	328.0	327.3
16	Fw	6.761363	6.396563	27.05758	27.47157	32.32401	32.97298	172.0865	171.83059
17	Pw2	5038.7	5038.8	4837.2	4837.6	4547.9	4548.6	4225.1	4224.8
18	Ps2	10636.7	10519.8	10208.7	10123.1	9588.7	9547.9	8897.4	8894.3
19	Ps	3261.4	3243.4	3195.1	3181.7	3096.6	3090.0	2981.2	2982.3
20	P	2752.3	2743.3	2694.2	2687.4	2604.9	2601.6	2497.2	2497.8
21	Pr	4.12	4.11	4.03	4.02	3.90	3.89	3.74	3.74
22	Tr	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
23	Z	0.733	0.733	0.736	0.733	0.733	0.732	0.730	0.730

Pc = 2273.2 Pc2 = 5167.4

Pt2 = 5031.9 Pw = 2244.7
4810.1 2199.5
4465.6 2132.7
4053.0 2055.4

Pc2-Pw2= 128.6 Pw2 = 5038.8
329.8 4837.6
618.9 4548.6
942.6 4224.8

n = 0.884

Pc2/(Pc2-Pw2) = 40.184
15.666
8.350
5.482

[Pc2/Pc2-Pw2]n = 26.181
11.386
6.528
4.500

AOF= Q 17.148
14.915
14.903
14.823

Laboratory Services
1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Mewbourne Oil Co.
Attention: Mr. R.Jones
P. O. Box 5270
Hobbs, New Mexico 88240

SAMPLE IDENTIFICATION: Chalk Bluff #3
COMPANY: Mewebourne Oil Co.
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 3/4/93 12:30PM
ANALYSIS DATE: 03-05-93
PRESSURE - PSIG 530.0
SAMPLE TEMP. °F
ATMOS. TEMP. °F

GAS (XX) LIQUID ( )
SAMPLED BY: R. Jones
ANALYSIS BY: Rolland Perry

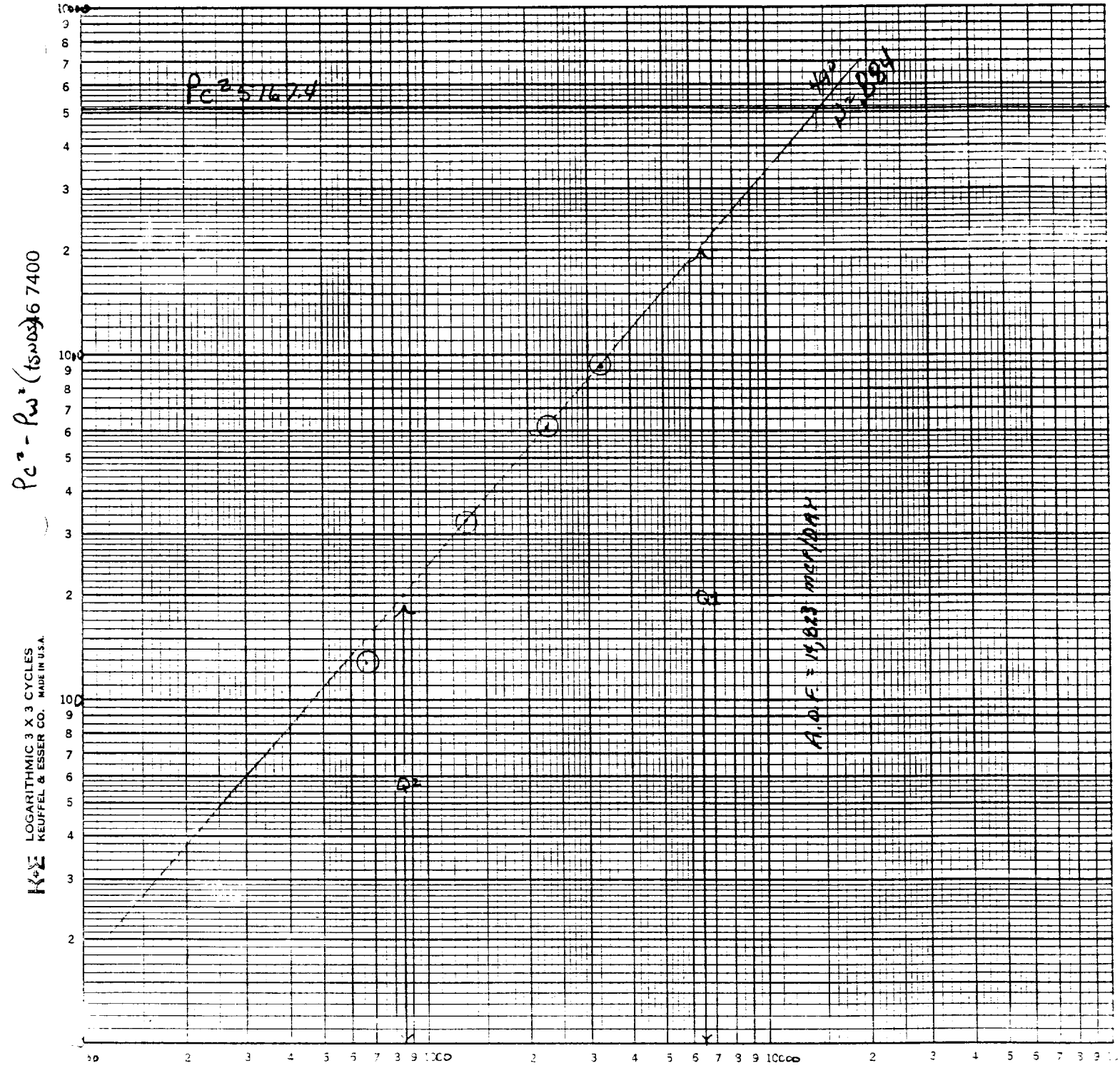
REMARKS:

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	0.33	
Carbon Dioxide	(CO2)	0.42	
Methane	(C1)	83.10	
Ethane	(C2)	8.14	2.164
Propane	(C3)	3.14	0.862
I-Butane	(IC4)	0.40	0.130
N-Butane	(NC4)	0.86	0.270
I-Pentane	(IC5)	0.39	0.140
N-Pentane	(NC5)	0.41	0.147
Hexane	(C6)	2.81	1.214
Heptanes Plus	(C7+)	0.00	0.000
		100.00	4.927

BTU/CU.FT. - DRY		1269	MOLECULAR WT.	21.1701
AT 14.650	DRY	1265		
AT 14.650	WET	1239	26# GASOLINE -	1.591
AT 15.025	DRY	1298		
AT 15.025	WET	1304		
SPECIFIC GRAVITY -				
CALCULATED		0.731		
MEASURED				

MEWBOURNE OIL COMPANY
Chalk Bluff Federal Com. Well #3
1-18S-27E
Eddy County, New Mexico
3/4/93



Q MCF/DAY

Log = 3.31291

Log = 2.92942

0155 File

RECEIVED

Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

APR 93

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: MEWVOURNE OIL COMPANY				Lease or Unit Name: CHALK BLUFF FEDERAL COM.	
Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 3/4/93	Well No.: 3
Completion Date: 1/16/93	Total Depth: 10150	Plug Back TD: 10102		Elevation: GL 3628'	Unit Ltr. - Sec. - TWP - Rge.: I 1 18S 27E
Csg. Size: 4½	Wt.: 10.5	d: 4.052	Set At: 8600 10150	Perforations: From: 9950 To: 9954	County: EDDY
Tbg. Size: 2 7/8 / 2 3/8 &	Wt.: 4.7 & / 6.5	d: 1.91 / 2.441	Set At: 9972	Perforations: From: 9957 To: 9972	Pool: MORROW / NORTH ILLINOIS Comp
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: subgke			Packer Set At: 9797		Formation: MORROW
Producing Thru: tbg.	Reservoir Temp. °F: 133	Mean Annual Temp. °F: 60	Baro. Press - P_a: 13.2		Connection: Transwestern

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9950	9950	.731	.42	.33			3.068	flg.

FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2260		Pkr.		48 hr.
1.	3 X 1.500	530	5	148	2230		"		1 hr.
2.	3 X 1.500	530	19	124	2180		"		1 hr.
3.	3 X 1.500	535	52	88	2100		"		1 hr.
4.	3 X 1.500	540	102	70	2000		"		1 hr.
5.									

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F pv.	Rate of Flow Q, Mcfd
1.	11.13	52.12	543.2	.9248	1.170	1.043	655
2.	11.13	101.59	543.2	.9436	1.170	1.049	1310
3.	11.13	168.84	548.2	.9741	1.170	1.066	2283
4.	11.13	237.54	553.2	.9905	1.170	1.075	3294
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.81	608	1.52	.919
2.	.81	584	1.46	.909
3.	.82	548	1.37	.880
4.	.83	530	1.32	.865
5.				

Gas Liquid Hydrocarbon Ratio	23.63 Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons	57.0 Deg.	
Specific Gravity Separator Gas	.731	XXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	G Mix .849
Critical Pressure	668 P.S.I.A.	664 P.S.I.A.
Critical Temperature	401 R	441 R

P_c 2273.2 P_c^2 5167.4

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.	5031.9	2244.7	5038.8	128.6
2.	4810.1	2199.5	4837.6	329.8
3.	4465.6	2132.7	4548.6	618.9
4.	4053.9	2055.4	4224.8	942.6
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.4821$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4.500$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 14,823$

Absolute Open Flow 14,823 Mcfd @ 15.025 | Angle of Slope θ 49 | Slope, n .884

Remarks: 13.3 BBLS CONDENSATE PRODUCED DURING TEST

Approved By Division	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTERS	KS	KS

THE WESTERN COMPANY OF NORTH AMERICA

WATER ANALYSIS

HOBBS, NEW MEXICO LAB — ANALYSIS #: HB010251

GENERAL INFORMATION

OPERATOR:	Mewbourne Oil Company	DEPTH:	0
WELL:	Chalk Bluff Fed #3	DATE SAMPLED:	
FIELD:		DATE RECEIVED:	02/24/93
FORMATION:		SUBMITTED BY:	Leonard Pounds
COUNTY:	Eddy	WORKED BY:	M Keith
STATE:	NM	PHONE #:	505-392-5556

SAMPLE DESCRIPTION: all water

PHYSICAL AND CHEMICAL DETERMINATIONS

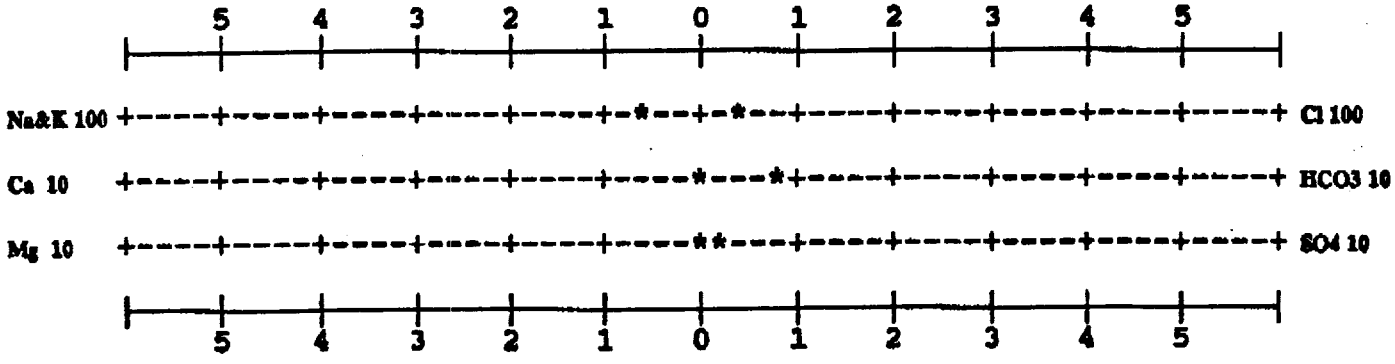
SPECIFIC GRAVITY: 1.003 @ 70 °F — PH: 6.75

RESISTIVITY (MEASURED): 3 OHMS @ 0 °F

IRON (FE++):	150 PPM	SULFATE:	100 PPM
CALCIUM:	10 PPM	TOTAL HARDNESS:	50 PPM
MAGNESIUM:	6 PPM	BICARBONATE:	487 PPM
CHLORIDE:	1595 PPM	SODIUM CHLORIDE (CALC)	2624 PPM
SODIUM+POTASS:	1243 PPM	TOT. DISSOLVED SOLIDS:	3474 PPM
KCL	:no trace	OIL	:none

REMARKS:

STIFF TYPE PLOT (IN MEQ/L)



ANALYST MK
M Keith

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reenter to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
Chalk Bluff Fed. Com. #3

2. Name of Operator
Mewbourne Oil Company

RECEIVED

9. API Well No.
30-015-27163

3. Address and Telephone No.
P.O. Box 5270 Hobbs, New Mexico 88241

APR 26 1993

10. Field and Pool, or Exploratory Area
N. Illinois Camp Morrow

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & ~~1980~~ 990' FEL
Sec. 1-T18S-R27E

C.C.D.

11. County or Parish, State
Eddy Co., N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
	☐ Recompletion	☐ New Construction
☒ Subsequent Report	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
☐ Final Abandonment Notice	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☒ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

1) Formation: Morrow
2) Amount of water produced 10 BW/mo.
3) Water analysis attached
4) Water is stored on lease in fiberglass tank
5) Produced water will be trucked by I & W Inc.
6) The disposal well is I & W Inc., Walter Solt #1, Unit Letter L, Section 5-T18S-R28E Eddy County, New Mexico

SWD #318

14. I hereby certify that the foregoing is true and correct
Signed [signature] Title Production Engineer Date March 4, 1993

(This space for Federal or State office use)
Approved by (ORIG. SGD.) DAVID R. GLASS Title PETROLEUM ENGINEER Date 4/22/93
Conditions of approval, if any:
SEE ATTACHED

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

COMPANY :MEWBOURNE OIL LEASE :CHALK BLUFF FED.COMWELL NO. : 3

UNIT :I SECTION : 1 TOWNSHIP : 19

L : 9961 H : 9961 L/H : 1 G/GMIX : 0.849

%CO2 : 0.42 %N2 : 0.33 H2S : DATE :

d : 2.278 Fr :0.012892 GH : 8456.9 RANGE : 27

VOL 1 : 655 PSIA 1 : 2243.2 RESV.TEMP 173.6

VOL 2 : 1310 PSIA 2 : 2193.2

VOL 3 : 2283 PSIA 3 : 2113.2 SHUT-IN PR= 2273.2

VOL 4 : 3294 PSIA 4 : 2013.2

PCR : 668

TCR : 401

	Pc = 2273.2		Pc2 =	5167.4					
	Pt2 = 5031.9		Pw =	2244.7					
	4810.1			2199.5					
	4465.6			2132.7					
	4053.0			2055.4					
	Pc2-Pw2= 128.6		Pw2 =	5038.8					
	329.8			4837.6					
	618.9			4548.6					
	942.6			4224.8					
	n =	0.884							
	Pc2/(Pc2-Pw2) =	40.184							
		15.666							
		8.350							
		5.482							
	[Pc2/Pc2-Pw2]n =	26.181							
		11.386							
		6.528							
		4.500							
	AOF= Q	17.148							
		14.915							
		14.903							
		14.823							

	LINE	RATE 1		RATE 2		RATE 3		RATE 4	
		'1ST	'2ND	'1ST	''2ND	'1ST	'2ND	'1ST	'2ND
1	QM	0.655	0.655	1.310	1.310	2.283	2.283	3.294	3.294
2	TW	534	534	534	534	534	534	534	534
3	Ts	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6
4	T	583.8	583.8	583.8	583.8	583.8	583.8	583.8	583.8
	PR (est)	3.36		3.28		3.16		3.01	
5	Z(est)	0.727	0.738	0.727	0.736	0.728	0.733	0.731	0.730
6	TZ	424.5	430.8	424.6	429.5	425.2	427.7	426.5	426.0
7	GH/TZ	19.924	19.629	19.918	19.691	19.891	19.774	19.829	19.852
8	eS	2.111	2.088	2.110	2.093	2.108	2.099	2.104	2.105
9	1-e-S	0.526	0.521	0.526	0.522	0.526	0.524	0.525	0.525
10	Pt	2243.2	2243.2	2193.2	2193.2	2113.2	2113.2	2013.2	2013.2
11	Pt2 /1000	5031.9	5031.9	4810.1	4810.1	4465.6	4465.6	4053.0	4053.0
12	Fr	0.012892	0.012892	0.012892	0.012892	0.012892	0.012892	0.012892	0.0128924
13	Fc=FrTZ	5.472	5.555	5.474	5.537	5.481	5.514	5.498	5.492
14	FcQm	3.58	3.64	7.17	7.25	12.51	12.59	18.11	18.09
15	L/H(FcQm)	12.8	13.2	51.4	52.6	156.6	158.5	328.0	327.3
16	Fw	6.761363	6.896568	27.05758	27.47157	82.32401	82.97298	172.0865	171.83059
17	Pw2	5038.7	5038.8	4837.2	4837.6	4547.9	4548.6	4225.1	4224.8
18	Ps2	10636.7	10519.8	10208.7	10123.1	9588.7	9547.9	8887.4	8894.3
19	Ps	3261.4	3243.4	3195.1	3181.7	3096.6	3090.0	2981.2	2982.3
20	P	2752.3	2743.3	2694.2	2687.4	2604.9	2601.6	2497.2	2497.8
21	Pr	4.12	4.11	4.03	4.02	3.90	3.89	3.74	3.74
22	Tr	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
23	Z	0.738	0.738	0.736	0.735	0.733	0.732	0.730	0.730

FORM C122-D

Laboratory Services
1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Mewbourne Oil Co.
Attention: Mr. R.Jones
P. O. Box 5270
Hobbs, New Mexico 88240

SAMPLE IDENTIFICATION: Chalk Bluff #3
COMPANY: Mewebourne Oil Co.
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 3/4/93 12:30PM
ANALYSIS DATE: 03-05-93
PRESSURE - PSIG 530.0
SAMPLE TEMP. °F
ATMOS. TEMP. °F

GAS (XX) LIQUID ( )
SAMPLED BY: R. Jones
ANALYSIS BY: Rolland Perry

REMARKS:

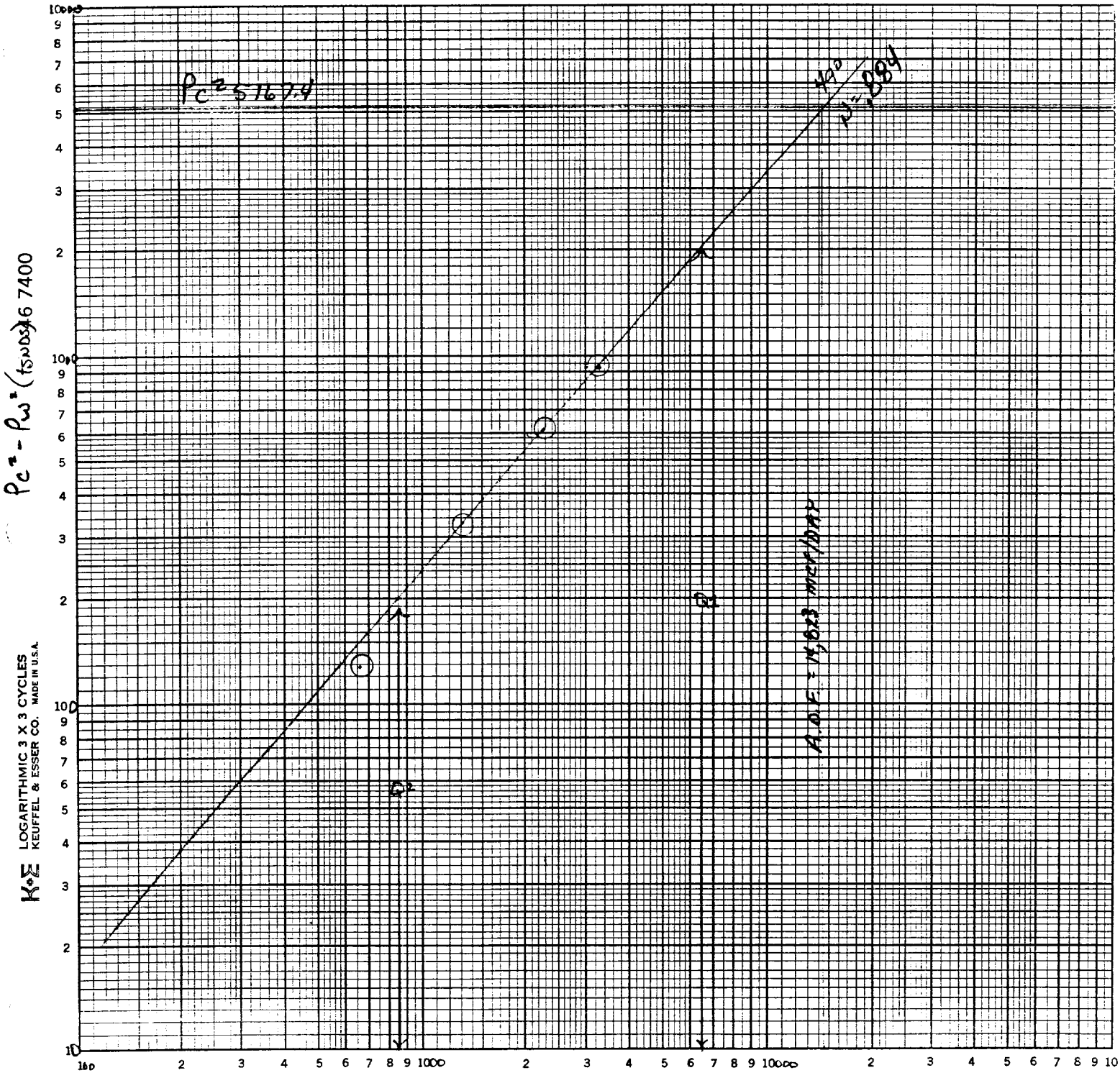
COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	0.33	
Carbon Dioxide	(CO2)	0.42	
Methane	(C1)	83.10	
Ethane	(C2)	8.14	2.164
Propane	(C3)	3.14	0.862
I-Butane	(IC4)	0.40	0.130
N-Butane	(NC4)	0.86	0.270
I-Pentane	(IC5)	0.39	0.140
N-Pentane	(NC5)	0.41	0.147
Hexane	(C6)	2.81	1.214
Heptanes Plus	(C7+)	0.00	0.000
		100.00	4.927

BTU/CU.FT. -	DRY	1269	MOLECULAR WT.	21.1701
AT 14.650	DRY	1265		
AT 14.650	WET	1239	26# GASOLINE -	1.591
AT 15.025	DRY	1298		
AT 15.025	WET	1304		

SPECIFIC GRAVITY -
CALCULATED 0.731
MEASURED

MEWBOURNE OIL COMPANY
Chalk Bluff Federal Com. Well #3
1-18S-27E
Eddy County, New Mexico
3/4/93



Log Q1 = 6500 : Log = 3.81291

Log Q2 = 850 : Log = 2.92942

Slope N = .88349 = .884

Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

RECEIVED
APR 0 8 1993

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: MEWBOURNE OIL COMPANY						Lease or Unit Name: CHALK BLUFF FEDERAL COM.		
Type Test: [X] Initial [ ] Annual [ ] Special						Test Date: 3/4/93	Well No.: 3	
Completion Date: 1/16/93	Total Depth: 10150			Plug Back TD: 10102		Elevation: GL 3628'	Unit Ltr. - Sec. - TWP - Rge.: I 1 18S 27E	
Csg. Size: 4½	Wt.: 10.5	d: 4.052	Set At: 8600 10150	Perforations: From: 9950 To: 9954			County: EDDY	
Tbg. Size: 2 7/8 2 3/8 &	Wt.: 4.7 & 6.5	d: 1.91 2.441	Set At: 9972	Perforations: From: 9957 To: 9972			Pool: MORROW NORTH ILLINOIS camp	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: subgke				Packer Set At: 9797			Formation: MORROW	
Producing Thru: tbg.	Reservoir Temp. °F: 133	Mean Annual Temp. °F: 60		Baro. Press - P_a: 13.2			Connection: Transwestern	
L: 9950	H: 9950	Gg: .731	% CO_2: .42	% N_2: .33	% H_2S:	Prover:	Meter Run: 3.068	Taps: flg.

FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2260		Pkr.		48 hr.
1.	3 X 1.500	530	5	148	2230		"		1 hr.
2.	3 X 1.500	530	19	124	2180		"		1 hr.
3.	3 X 1.500	535	52	88	2100		"		1 hr.
4.	3 X 1.500	540	102	70	2000		"		1 hr.
5.									

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F pv.	Rate of Flow Q, Mcfd
1.	11.13	52.12	543.2	.9248	1.170	1.043	655
2.	11.13	101.59	543.2	.9436	1.170	1.049	1310
3.	11.13	168.84	548.2	.9741	1.170	1.066	2283
4.	11.13	237.54	553.2	.9905	1.170	1.075	3294
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.81	608	1.52	.919
2.	.81	584	1.46	.909
3.	.82	548	1.37	.880
4.	.83	530	1.32	.865
5.				

Gas Liquid Hydrocarbon Ratio	23.63 Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons	57.0 Deg.	
Specific Gravity Separator Gas	.731	XXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	G Mix .849
Critical Pressure	668 P.S.I.A.	664 P.S.I.A.
Critical Temperature	401 R	441 R

P_c 2273.2 P_c^2 5167.4

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.	5031.9	2244.7	5038.8	128.6
2.	4810.1	2199.5	4837.6	329.8
3.	4465.6	2132.7	4548.6	618.9
4.	4053.9	2055.4	4224.8	942.6
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.4821$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4.500$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 14,823$

Absolute Open Flow 14,823 Mcfd @ 15.025 | Angle of Slope θ 49 | Slope, n .884

Remarks: 13.3 BBLS CONDENSATE PRODUCED DURING TEST

Approved By Division	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTERS	KS	KS

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons Division
811 S. 1st
Artesia, NM 88210-2834

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
NM 0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
Chalk Bluff Fed. ~~Comm.~~ #3

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-015-27163

3. Address and Telephone No.
P. O. Box 5270, Hobbs, NM 88241 505-393-5905

10. Field and Pool, or Exploratory Area
N. Illinois Camp Morrow

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & 990' FEL of Section 1, T18S, R27E

11. County or Parish, State
Eddy

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
	☒ Recompletion	☐ New Construction
☐ Subsequent Report	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
☐ Final Abandonment Notice	☐ Altering Casing	☐ Conversion to Injection
	☐ Other w/s	☐ Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinet details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markders and zones pertinent to this work.)*

Add Morrow perforations 9860' to 9870'.

APR 1999 RECEIVED OCD - ARTESIA

ACCEPTED FOR RECORD
APR 27 1999

(ORIG. SGD.) GARY GOURLEY

14. I hereby certify that the foregoing is true and correct

Signed Jeffery Edwards Title District Manager Date 04/15/99

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

30-015-27163

Oxford®

ESSELTE

MADE IN U.S.A. NO. R753 1/3

1-21-93

Spectral Density
Dual Spaced Neutron
6365'- 8467'
400'- 10,100'

Comp. Sonic Log.
6365'- 8467'

Dual Induction Laterolog
6365'- 8501'

Dual Lat.
6365'- 8467'
8968'- 10,143'

MSG Gamma Collar
CBL Log
1340'- 10,069'

NSL- R-9760

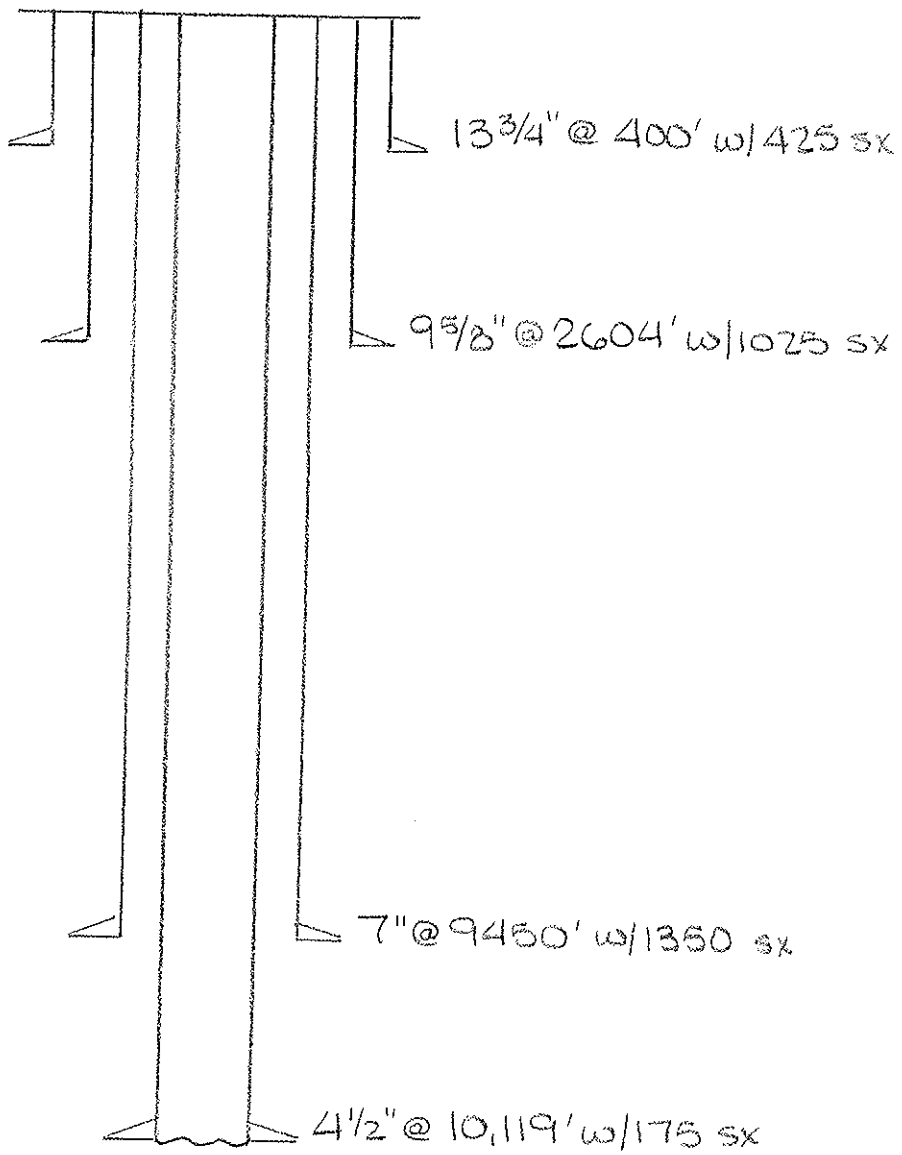
R-9760
SD + NSL
11-4-92

SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 83
Artificial Penetration Review

OPERATOR	Navajo Refining Co.	**STATUS**	Active SWD
LEASE	WDW	**LOCATION**	Sec. 6 -T18S-R27E
WELL NUMBER	3	**MUD FILLED BOREHOLE**	NA
DRILLED	12-22-90	**TOP OF INJECTION ZONE**	7319'
PLUGGED	NA	**API NO.**	30-015- 26575

REMARKS: Calc. Top of Cement behind 7" @ 3841'

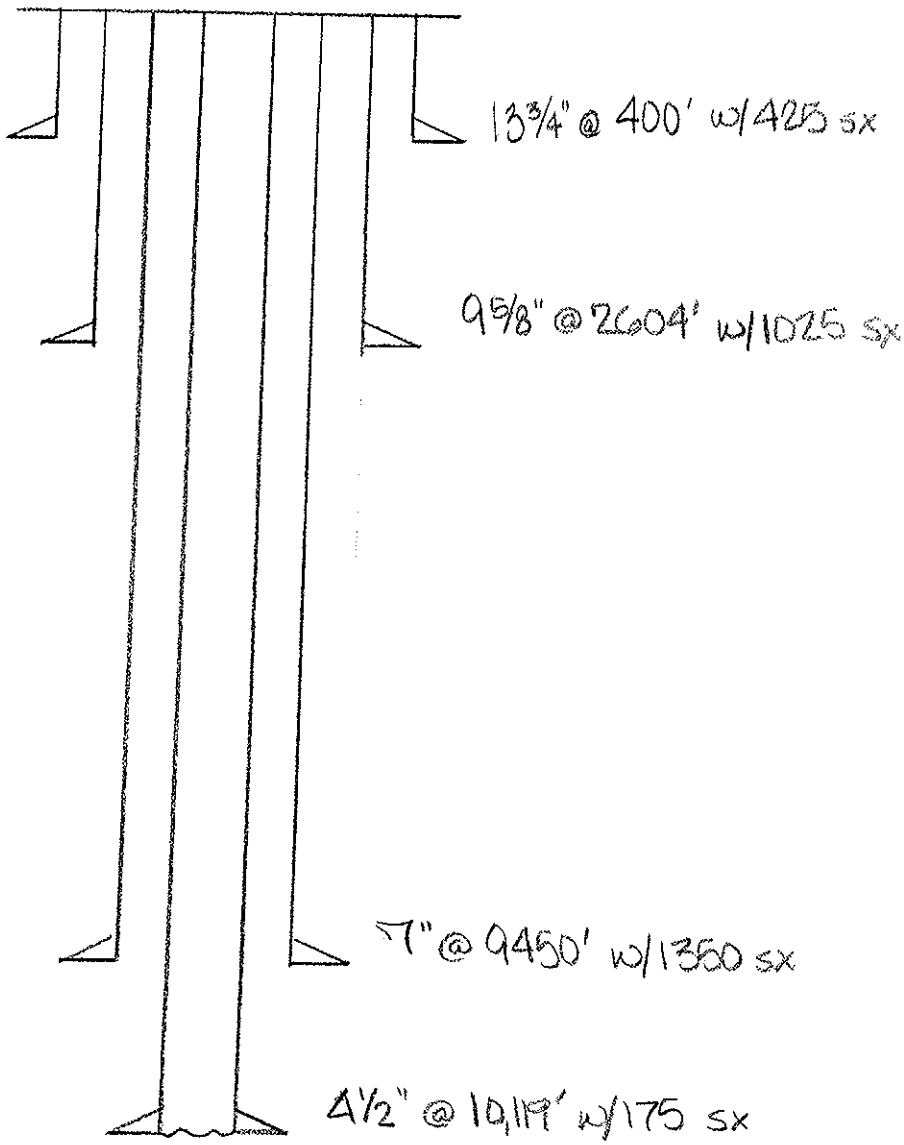


SUBSURFACE

NAVAJO REFINING COMPANY, L.L.C.
Map ID No. 96
Artificial Penetration Review

OPERATOR	Navajo Refining Co.	**STATUS**	Active
LEASE	WDW	**LOCATION**	Sec. 6 -T18S-R27E
WELL NUMBER	3	**MUD FILLED BOREHOLE**	—
DRILLED	N/A	**TOP INJECTION ZONE**	-3694'
PLUGGED	N/A	**API NO.**	30-015-26575

REMARKS:



MAP ID NO. 96

NAVAJO REFINING COMPANY
WASTE DISPOSAL WELL NO. 3

API NO. 30-015-26575

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division
811 S. 1st Street
Artesia, NM 88210-2834

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
Chalk Bluff Federal Comm #1

9. API Well No.
30-015-26575

10. Field and Pool, or Exploratory Area
N. Illinois Camp Morrow

11. County or Parish, State
Eddy, NM

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other

2. Name of Operator
Mewbourne Oil Com[any

3. Address and Telephone No.
PO Box 5270, Hobbs, NM 505-393-5905

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
790' FSL & 2250' FWL, Sec.1 T-18S R-27E

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
☐ Final Abandonment Notice	☐ Altering Casing	☐ Conversion to Injection
	☒ Other MIT	☐ Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinet details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markders and zones pertinent to this work.)*

The above caption well was successfully MIT'ed on 10/25/2000. (500 psi for 30 min.)
The pressure chart is enclosed.
If any question, please call.

ACCEPTED FOR RECORD
NOV 15 2000
43
BLM

RECEIVED
OCD - ARTESIA

14. I hereby certify that the foregoing is true and correct

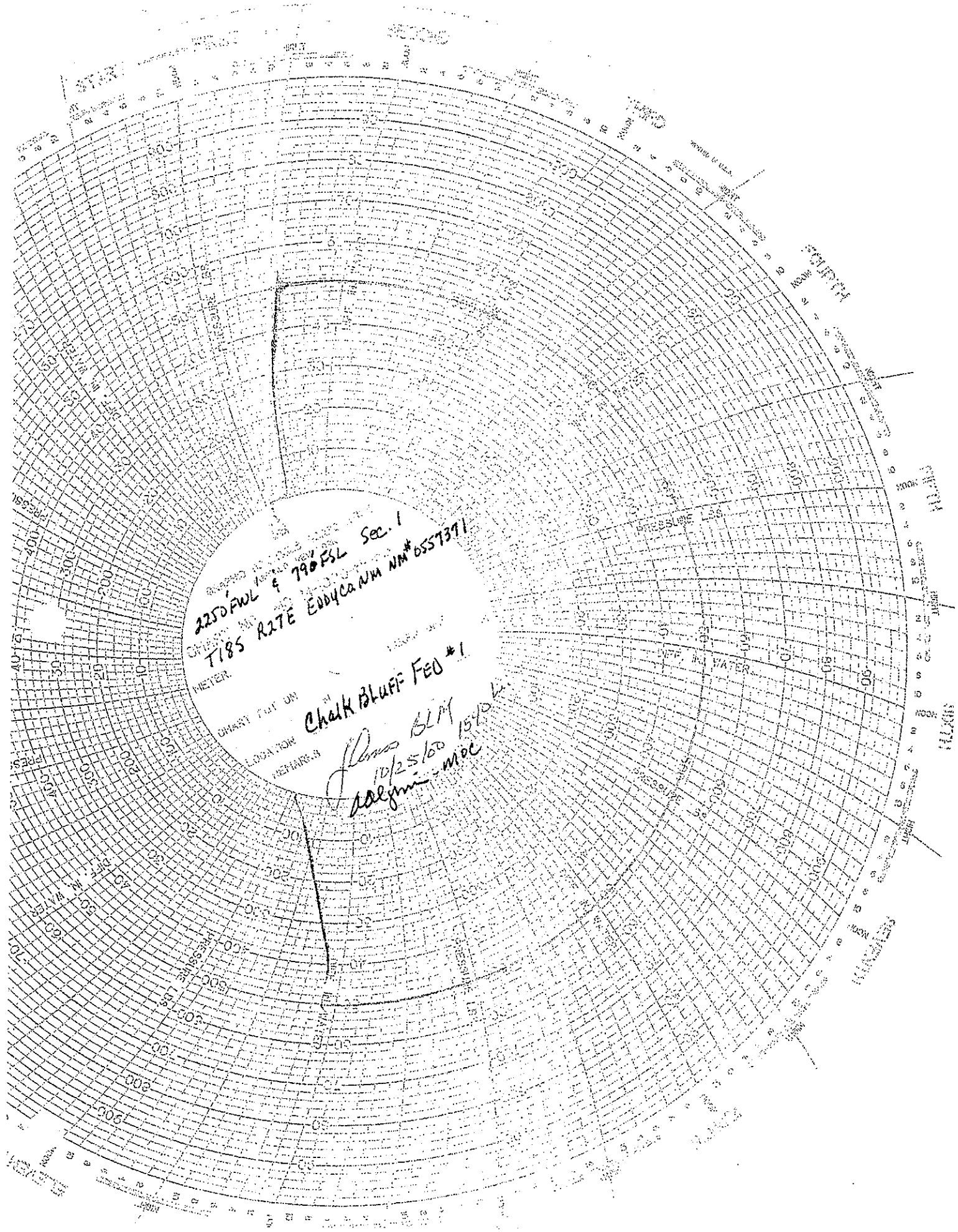
Signed [signature] Title N.M. Young District Manager Date 11/01/00

(This space for Federal or State office use)

Approved by Record Only Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side


2250 FWL & 790 FSL Sec. 1
T18S R27E Eddy Co NM NM# 0557371
METER
CHART PUT ON
Chalk Bluff FED #1
LOCATION
REMARKS
PRESSURE LBS
OFF IN WATER
NOON

C15F

RECEIVED

JUN 20 1991

O. C. D.
ARTESIA, OFFICE

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

RECEIVED
MAY 24 1991
DIST. 6 N.M.
Carlsbad, New Mexico

SUBMIT IN TRIPLICATE

1. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P. O. Box 7698, Tyler, Texas 75711
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2250' FWL & 790' FSL of Sec. 1, T18S-R27E
5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
8. Well Name and No.: CHALK BLUFF FED. COM #1
9. API Well No.: 30-015-26575
10. Field and Pool, or Exploratory Area: No. Illinois Camp Morrow
11. County or Parish, State: Eddy, New Mexico

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other Fracture Treat	[ ] Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

4/24/91 - Western fracture treated Morrow Sand perfs 9936-46', 9964'67' down tubing with 16,000 gals 73 downhole slurry quality Binary Westfoam carrying 16,000# 20/40 mesh ACFRAC Black Westprop-3. Screened out with 545 gals CO_2/N_2 2% KCL water. Screened out at 10,100# with 1200 gals of 3# stage in formation and 545 gals flush in tubing. Pumped 116 sxs Proppant into formation and left 25 sacks in casing and 19 sacks in tubing. ISDP 8300#, 5 mins 7600#, 10 mins 7200#, 15 mins 6800#. Avg 10.0 BPM at 8200#. Job complete 10:20 AM.

ACCEPTED FOR RECORD
JUN 14 1991
SJS
CARLSBAD, NEW MEXICO

14. I hereby certify that the foregoing is true and correct

Signed Clayton Thompson Title Engr. Oprns. Secretary Date 5/21/91

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

NM OIL CONS COMMISSION
Drawer DD
Artesia, NM 88210

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

FEB 21 1994

1. Type of Well: ☐ Oil Well ■ Gas Well ☐ Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2250' FWL & 790' FSL Sec. 1-T18S-R27E
5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
8. Well Name and No.: Chalk Bluff Fed. Com. #1
9. API Well No.: 30-015-26575
10. Field and Pool, or Exploratory Area: N. Illinois Camp
11. County or Parish, State: Eddy Co., N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
■ Notice of Intent	☐ Abandonment	☐ Change of Plans
	☐ Recompletion	☐ New Construction
☐ Subsequent Report	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
☐ Final Abandonment Notice	☐ Altering Casing	☐ Conversion to Injection
	■ Other Shut-In-Status	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Mewbourne Oil Company here by requests temporarily abandon status pending further evaluation of the lease for the above well. The well was spudded 12/22/90.

APPROVED FOR 12 MONTH PERIOD
ENDING 1/25/95

14. I hereby certify that the foregoing is true and correct
Signed Robert G. Jones Title Petroleum Engineer Date 01/25/94

(This space for Federal or State office use)
Approved by (ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 2/16/94
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

dsf

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

NOV 17 1993

O. C. D.

8. Well Name and No.
Chalk Bluff Fed. Comm. #1

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-015-26575

3. Address and Telephone No.
P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905

10. Field and Pool, or Exploratory Area
N. Illinois Camp

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2250' FWL & 790' FSL of Sec. 1-T18S-R27E

11. County or Parish, State
Eddy Co., N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[X] Recompletion	[ ] New Construction
	[X] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
[ ] Final Abandonment Notice	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

* Verbal from Adam Salameh

9/10/93 Abandon Morrow formation. Set CIBP @ 9800' & cover w/35' cement.
9/11/93 Perforate Cisco from 7826'-7830'. Test & evaluate.
9/12/93 Squeeze Cisco from 7826'-7830' w/600 sx. Class "C".
9/15/93 Drill out squeeze perfs. to 7792'. Squeeze held 2,000#.
9/16/93 Perforate Cisco from 7676'-7678'. Test and evaluate.
9/17/93 Abandon Cisco formation, set CIBP @ 7600' & cover w/35' cement.
9/18/93 Perforate Wolfcamp 7304'-7314'. Test & evaluate.
9/19/93 Acidize Wolfcamp w/1500 gal. 15% NE-FE from 7304'-7314'.
9/21/93 Set CIBP @ 7294' & perforate Wolfcamp from 7262'-7278'. Test & evaluate.
9/22/93 Acidize Wolfcamp w/2000 gal. 15% NE-FE from 7262'-7278'.
9/23/93 Set CIBP @ 7208' & perforate Wolfcamp from 7050'-7102'. Test & evaluate.
9/24/93 Acidize Wolfcamp w/2000 gal. 15% NE-FE from 7050'-7102'.
9/25/93 Set CIBP @ 7010'.

14. I hereby certify that the foregoing is true and correct

Signed Robert G. Jones Title Petroleum Engineer Date 10/05/93

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

ACCEPTED FOR RECORD
NOV 15 1993
CARLSBAD, NEW MEXICO

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instructions on Reverse Side

C/SF

3160-5
1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

RECEIVED
OCT 19 1993
O. C. D.

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
Chalk Bluff Fed. Com. #1

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-015-26575

3. Address and Telephone No.
P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905

10. Field and Pool, or Exploratory Area
N. Illinois Camp

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2250' FWL & 790' FSL of Sec. 1-T18S-R27E

11. County or Parish, State
Eddy Co., N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
	☒ Recompletion	☐ New Construction
☐ Subsequent Report	☒ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
☐ Final Abandonment Notice	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

09/08/93 Abandon Morrow Perfs 9861' - 9967'

- Set CIBP @ 9800' - cover w/35' cement.
- Recomplete in Cisco Formation - Test & evaluate.
- If unecomomical recomplete in Wolfcamp - Test & evaluate.

RECEIVED
SEP 22 10 43 AM '93
CARL
AREA

14. I hereby certify that the foregoing is true and correct
Signed K. G. Jones Title Petroleum Engineer Date 09/07/93

(This space for Federal or State office use)
Approved by (ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 10/15/93
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
SEP 28 1992
O. C. D.
ARTESIA, NM

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
1. Type of Well: ☐ Oil Well ■ Gas Well ☐ Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P. O. Box 7698, Tyler, Texas 75711 (903) 561-2900
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2250' FWL & 790' FSL Sec. 1, T18S-R27E
8. Well Name and No.: Chalk Bluff Fed.Com.#1
9. API Well No.: 30-015-26575
10. Field and Pool, or Exploratory Area: N.Illinois Camp-Mor.-Gas
11. County or Parish, State: Eddy

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
■ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	■ Other Additional perfs, acidize & frac	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

8/13/92 - Perf Middle Morrow 9861-9882', 2 SPF, 10' Net, 22 holes.

8/14/92 - Acidized w/3500 gals 7½% HCL + additives + 1000 SCF/bbl nitrogen carrying 80 ball sealers. Flushed w/2% KCL wtr + 1000 SCF/bbl nitrogen. ISDP 4300#, 5 mins 3800#, 10 mins 3400#, 15 mins 2800#. Avg rate 3.7 BPM, AP 5000#, MP 5600#. Blew well down to pit 8/15 - 8/18/92.

8/19/92 - MI swab unit. Pressure tested tbg to 2000#.Held OK. Removed tree. RU BOP. RU swab. Swabbed well down to 5300'.

8/20/92 - Swabbed down to 6500'. POOH w/tbg & pkr. TIH w/new pkr assembly & 200 jts tbg. Tested tbg to 8000#. 8/21/92 - Continued testing tbg. Set pkr @ 9740.68' w/15 pts compression. Press annulus to 2000#. Held OK. Started swabbing. Had light blow of gas.

8/22/92 - RU Western Co. Acidized perfs w/1500 gals 7½% HCL acid + additives + 1000 scf/bbl nitrogen + 35 ball sealers. Flushed w/2% KCL wtr. ISDP 400#. 5 min 3700#, 10 min 3700#, 15 min 3600#. ATP 5100#, MTP 5400#. RD Western. Opened well to pit on 12/64" choke. No show of gas or oil. Recovering load.

8/23/92 - RU swab. FL @ 7000'. Swabbed dry in 3 runs. Continued swabbing. Recovering load.

14. I hereby certify that the foregoing is true and correct

Signed: [signature] Title: Engr. Oprns. Secretary Date: 9/11/92

(This space for Federal or State office use)

Approved by: Title: Date:

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
MAY 5 7 46 AM '91

Type Test: [X] Initial [ ] Annual [ ] Special		Test Date: 03/15/91	
Company: Mewbourne Oil Company	Connection: Transwestern	RECEIVED	
Pool: Undesignated North Illinois Camp Morrow	Formation: Morrow	MAY - 7 1991	Unit: N
Completion Date: 03/05/91	Total Depth: 10,120'	Plug Back TD: 10,075'	O.C.D. ARTESIA, OFFICE 3609'
Farm or Lease Name: Chalk Bluff Federal			
Cag. Size: 4 1/2" 5 1/2"	Wt.: 11.6#	d:	Set At: 10,120'
Perforations: From 9936' To 9967'			Well No.: 1
Tbg. Size: 2 7/8"	Wt.: 6.5	d:	Set At: 9,805'
Perforations: From Open To End			Unit: N Sec.: 1 Twp.: 18S Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single Gas		Packer Set At: 9805'	County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 148 @ 10,120	Mean Annual Temp. °F: 72	Baro. Press. – P_a: 13.2
State: New Mexico			

L	H	Cg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9949	9949	.660	.43	.42	----		3.068	Flg.

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI	S.I.				2380				72 Hr.
1.	3 X 1.125	426.8	4	51	2175		Pkr.		1 Hr.
2.	3 x 1.125	446.8	11	51	2070		Pkr.		1 Hr.
3.	3 x 1.125	446.8	32	51	1900		Pkr.		1 Hr.
4.	3 x 1.125	426.8	72	45	1605		Pkr.		1 Hr.
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	6.217	41.952	440	1.009	1.225	1.048	337
2.	6.217	71.134	460	1.009	1.225	1.051	574
3	6.217	121.326	460	1.009	1.225	1.051	980
4.	6.217	177.989	440	1.015	1.225	1.051	1446
5							

NO.	P_t	Temp. °R	T_r	Z
1	.65	511	1.37	.910
2.	.68	511	1.37	.906
3.	.68	511	1.37	.906
4.	.65	505	1.35	.905
5				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: _____ Deg.
Specific Gravity Separator Gas: .660 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 673 P.S.I.A. _____ P.S.I.A.
Critical Temperature: 374 R _____ R

P_c 2472 P_c^2 6110.7

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2264	5125	985.7
2		2147	4609	1501.7
3		1966	3865	2245.7
4		1639	2686	3424.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.784$

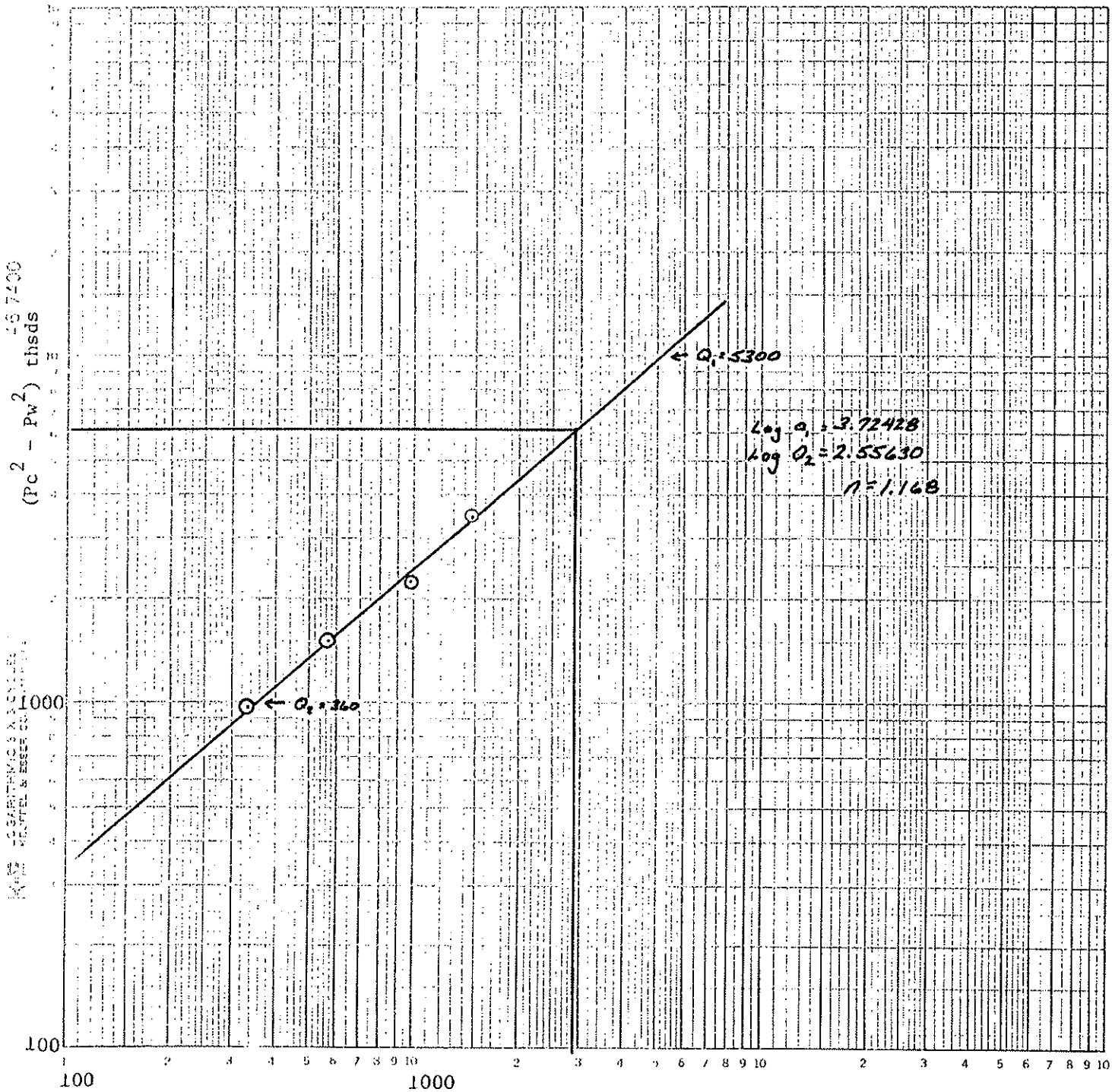
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.967$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.844$

Absolute Open Flow: 2,844 Mcfd @ 15.025 | Angle of Slope θ: 41° | Slope, n: 1.168

Remarks: Well made 0 bbl. fluid during test

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Greg Milner	Greg Milner	Bill Pierce



Q MCF/D

AOF = 2.9 MMCF/D

Laboratory Services

1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Mewbourne Oil Co.
Attention: Mr, Greg Milner
P. O. Box 5270
Hobbs, New Mexico 88241

SAMPLE IDENTIFICATION: Chalk Bluff Federal #1
COMPANY: Mewbourne Oil Co.
LEASE:
PLANT:

SAMPLE DATA:

DATE SAMPLED:	03-15-91
ANALYSIS DATE:	03-18-91
PRESSURE - PSIG	460.00
SAMPLE TEMP. °F	51.00
ATMOS. TEMP. °F	

GAS (XX) LIQUID ( )
SAMPLED BY: Gregory Milner
ANALYSIS BY: Rolland Perry

REMARKS:

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Oxygen	(O2)		
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	0.42	
Carbon Dioxide	(CO2)	0.43	
Methane	(C1)	87.54	
Ethane	(C2)	7.07	1.886
Propane	(C3)	2.38	0.654
I-Butane	(IC4)	0.31	0.100
N-Butane	(NC4)	0.54	0.169
I-Pentane	(IC5)	0.20	0.071
N-Pentane	(NC5)	0.14	0.052
Hexane	(C6)	0.97	0.399
Heptanes Plus	(C7+)	0.00	0.000
		100.00	3.331

BTU/CU.FT. - DRY	1156	MOLECULAR WT	19.0972
AT 14.650 DRY	1153		
AT 14.650 WET	1133	26# GASOLINE -	0.578
AT 15.025 DRY	1182		
AT 15.025 WET	1162		

SPECIFIC GRAVITY -	
CALCULATED	0.660
MEASURED	0.000

WORK SHEET FOR CALCULATION OF WEL. AD PRESSURES (P_c or [illegible]).

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or [illegible])

Form C-122F
Adopted 9-1-65

COMPANY Mewbourne Oil LEASE Chalk Bluff Fed. WELL NO. 1 DATE 3-18-91

LOCATION: Unit _____ Section 1 Township 18S Range 27E

9949 H 9949 L/H 1.000 G .660 % CO_2 .43 % N_2 .42 % H_2S —

GH 6566 P_{cr} 673 (TABLE IX & X) T_{cr} 374 (TABLE IX & X)

LINE		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	532	532						
2	T_s(B.H. °R)	608	608						
3	$T=(\frac{T_w + T_s}{2})$	570	570						
4	Z (Est.)	.800	.790						
5	TZ	456.0	450.4						
6	GH/TZ	14.399	14.578						
7	e^s(Table XIV)	1.716	1.727						
8	P_f or [illegible]	3249	3249						
9	P_f^2 or [illegible]	10556	10556						
10	$P_c^2 = P_f^2/e^s$ or [illegible]	6151.7	6110.6						
11	P_c or [illegible]	2480.3	$\boxed{2472.0}$	$= P_c$					
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	2864.6	2860.5						
13	$P_r = (P/P_{cr})$	4.26	4.25						
14	$T_r = (T/T_{cr})$	1.52	1.52						
15	Z (Table XI)	.790	.790						

One copy to be filed in District Office (Work copy acceptable)

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES ([illegible] or P_w)

FROM KNOWN BOTTOM HOLE PRESSURE ([illegible] or P_s)

Form C-1221
Adopted 9-1-65

COMPANY Mewbourne LEASE Chalk Bluff Fed. WELL NO. 1 DATE 3-18-91

LOCATION: Unit _____ Section 1 Township 18S Range 27E

L 9949 H 9949 L/H 1.00 G .660 % CO_2 .43 % N_2 .42 % H_2S —

GH 6566 P_{cr} 673 (TABLE IX & X) T_{cr} 374 (TABLE IX & X)

LINE		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	532	532	532	532	532	532	532	532
2	T_s(B.H. °R)	608	608	608	608	608	608	608	608
3	$T=(\frac{T_w + T_s}{2})$	570	570	570	570	570	570	570	570
4	Z (Est.)	.835	.783	.783	.781	.781	.780	.780	.792
5	TZ	476.0	446.5	446.5	445.1	445.2	444.8	444.6	451.7
6	GH/TZ	13.796	14.704	14.712	14.753	14.749	14.761	14.768	14.537
7	e^s(Table XIV)	1.678	1.736	1.736	1.739	1.739	1.739	1.740	1.725
8	[illegible] or P_s	2983	2983	2831	2831	2593	2593	2152	2152
9	[illegible] or P_s^2	8898.3	8898.3	8014.6	8014.6	6723.6	6723.6	4631.1	4631.1
10	[illegible] $= P_f^2/e^s$ or $P_w^2 = P_s^2/e^s$	5304.3	5126.6	4616.2	4609.0	3867.2	3865.5	2661.7	2684.9
11	[illegible] or P_w	2303.1	2264.2	2148.5	2146.9	1966.5	1966.1	1631.5	1638.6
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	2643.1	2623.6	2489.8	2488.9	2279.8	2279.5	1891.7	1895.3
13	$P_r = (P/P_{cr})$	3.93	3.90	3.70	3.70	3.39	3.39	2.81	2.82
14	$T_r = (T/T_{cr})$	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
15	Z (Table XI)	.783	.783	.781	.781	.780	.780	.792	.792

One copy to be filed in District Office (Work copy acceptable)

COMPANY: PRO WIRELINE

CLIENT: MEWBOURNE OIL

GAUGE NUMBER: 12235

WELL NAME: CHALK BLUFF

WELL NUMBER: 1

TEST NUMBER: 1

LOCATION:

TEST OPERATOR: BURRELL

COMMENTS: 4 POINT FLOW TEST RAN
AFTER 72 HOUR BUILD-UP

POSITION	GAUGE SERIAL NUMBER
1	
2	
3	
4	

AGE START DATE: 3/15/91 GAUGE S/N: 12235

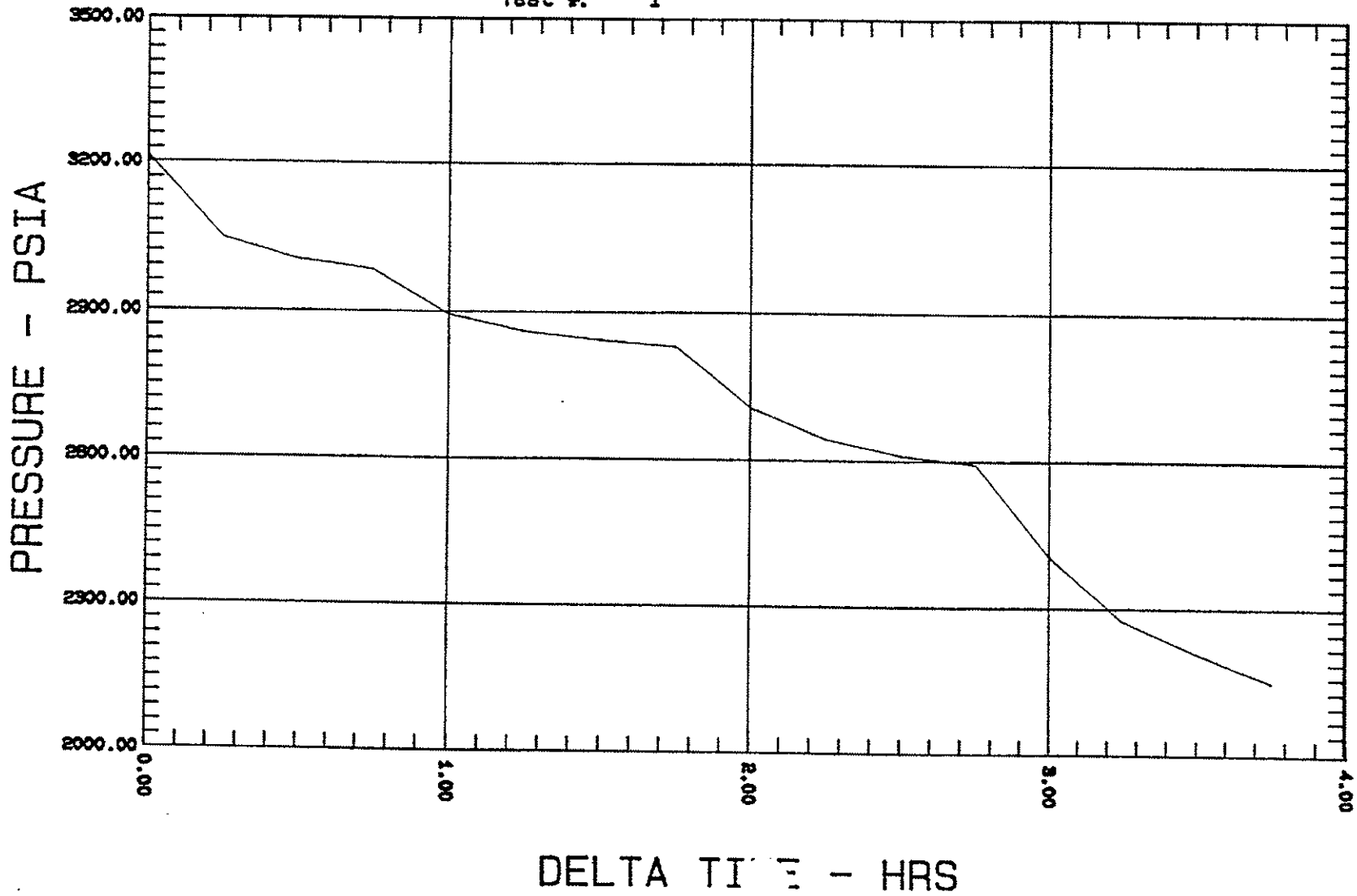
DATA FILE: 3

REAL TIME	DELTA TIME HRS	PRESSURE PSIA	TEMPERATURE 'F	COMMENTS
9:45: 0	0.0000	3213.00		START RATE 1
10: 0: 0	0.2500	3046.00		
10:15: 0	0.5000	3003.00		
10:30: 0	0.7500	2983.00		START RATE 2
10:45: 0	1.0000	2894.00		
11: 0: 0	1.2500	2861.00		
11:15: 0	1.5000	2843.00		
11:30: 0	1.7500	2831.00		START RATE 3
11:45: 0	2.0000	2707.00		
12: 0: 0	2.2500	2643.00		
12:15: 0	2.5000	2610.00		
12:30: 0	2.7500	2593.00		START RATE 4
12:45: 0	3.0000	2405.00		
13: 0: 0	3.2500	2276.00		
13:15: 0	3.5000	2210.00		
13:30: 0	3.7500	2152.00		END OF TEST

Plot starting date: 3/15/91
time: 9:45: 0
Gauge S/N

Company: PRO WIRELINE
Client: MEWBOURNE OIL
Well name: CHALK BLUFF
Well #: 1
Test #: 1

Location:
Operator: BURRELL
Comments: 4 POINT FLOW TEST RAN
AFTER 72 HOUR BUILD UP



Form 3160-4
(November 1983)
(formerly 9-330)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

CONFIDENTIAL
RECEIVED
JUL 23 1992
O. C. D.
ARTESIA, OFFICE

2. NAME OF OPERATOR: Mewbourne Oil Company

3. ADDRESS OF OPERATOR: P. O. Box 7698, Tyler, Texas 75711

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements): At surface 2250' FWL & 790' FSL

At top prod. interval reported below

At total depth Same

5. LEASE DESIGNATION AND SERIAL NO.: NM-0557371

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME: Chalk Bluff Federal Com

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: N. Illinois Camp Morrow

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 1-T18S-R27

14. PERMIT NO. / DATE ISSUED: API #30-015-26575

12. COUNTY OR PARISH: Eddy

13. STATE: N.M.

15. DATE SPUDDED: 12/22/90

16. DATE T.D. REACHED: 1/29/91

17. DATE COMPL. (Ready to prod.): 3/07/91

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: KB 3625', GM 3609'

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD: 10,120'

21. PLUG, BACK T.D., MD & TVD: 10,079'

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY: → ROTARY TOOLS: X CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 9936-46', 9964-67' - Morrow

25. WAS DIRECTIONAL SURVEY MADE: Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN: SDL-DSN, DLL-MSFL, DILL

27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.50#	400'	17-1/2"	425 - Circ	None
9-5/8"	36#	2604'	12-1/4"	1025 - Circ	None
7"	26# & 29#	9450'	8-3/4"	1350 - Circ	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
4-1/2"	9051'	10119'	175	

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	9805'	9805'

31. PERFORATION RECORD (Interval, size and number)
9936-46', 9964-67'
13', 2 SPF, Total 28

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
9936-67'	3000 gals Mod-101 acid + 1000 SCF/bbl N2 + 50 ball sealers. Flushed w/35 bbls 2% KCL water + 1000 SCF/bbl N2.

33.* PRODUCTION

DATE FIRST PRODUCTION: | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): Flowing | WELL STATUS (Producing or shut-in): Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3/11/91	24 hrs	8/64"	→	1	886	0	886:1

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
1600#		→	1	886	0	58

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): Sold

TEST WITNESSED BY: W. H. CLOVEY

35. LIST OF ATTACHMENTS: Logs

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED Raylene Thompson TITLE Engr. Oprns. Secretary DATE 3/18/91

ACCEPTED FOR RECORD
SDS
APR 1 1991
CARLSBAD, NEW MEXICO

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries)

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Lower Morrow	9936'	9967'	Sandstone
Middle Morrow	9861'	9881'	Sandstone

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Yates	424'	
Queen	1138'	
Grayburg	1484'	
San Andres	1976'	
Glorietta	3458'	
Tubb	4451'	
Drinkard	5376'	
Abo	5794'	
Wolfcamp	6420'	
Cisco	7666'	
Canyon	8368'	
Strawn	8844'	
Morrow	9454'	
Morrow Clastics	9770'	
Barnett	10016'	

KEN REYNOLDS—PRESIDENT
ARNIE NEWKIRK—VICE-PRESIDENT

WEK DRILLING CO., INC. — OIL WELL DRILLING CONTRACTORS

P. O. Box 1498 ROSWELL, NEW MEXICO 88202-1498
505/623-5070 ROSWELL, NM
505/746-2719 ARTESIA, NM

February 05,1991

Mewbourne Oil Company,Inc.
P.O. Box 5270
Hobbs, N.M. 88241

REF: Chalk Bluff Fed Comm #1

Gentlemen:

The following is a Deviation Survey on the above referenced well located in Eddy County, New Mexico.

400' - 1/4°	4674' - 1 1/4°	6559' - 2 1/2°
905' - 3/4°	5120' - 1 1/2°	6650' - 2 1/4°
1303' - 3/4°	5639' - 1 1/4°	7146' - 1 3/4°
1901' - 1 1/4°	6077' - 3 1/2°	7672' - 3/4°
2399' - 1 3/4°	6126' - 3 3/4°	7800' - 3/4°
2600' - 1 3/4°	6189' - 3 3/4°	8291' - 1°
3098' - 1 1/2°	6250' - 3 3/4°	8815' - 1°
3592' - 1 1/2°	6312' - 3 1/2°	9313' - 3/4°
3682' - 3/4°	6374' - 3 1/4°	9808' - 1 1/4°
4177' - 1°	6467' - 2 3/4°	10,120' 3/4° TD

Sincerely,

Arnold Newkirk

Arnold Newkirk
Vice-President

STATE OF NEW MEXICO)
)
COUNTY OF CHAVES)

The foregoing was acknowledged before me this 05th day of February 1991 by Arnold Newkirk.

MY COMMISSION EXPIRES

October 07,1992

Linda Rogers

NOTARY PUBLIC

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
MAY 5 7 46 AM '91
OCD
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special		Test Date: 03/15/91	
Company: Mewbourne Oil Company	Connection: Transwestern	RECEIVED MAY - 7 1991	Unit: CARLSBAD AREA
Pool: Undesignated North Illinois Camp Morrow	Formation: Morrow		
Completion Date: 03/05/91	Total Depth: 10,120'	Plug Back TD: 10,075'	Elev. 3609'
Farm or Lease Name: Chalk Bluff Federal			
Csg. Size: 4 1/2" / 5 1/2"	Wt.: 11.6#	d:	Set At: 10,120'
Perforations: From 9936' To 9967'			Well No.: 1
Tbg. Size: 2 7/8"	Wt.: 6.5	d:	Set At: 9,805'
Perforations: From Open To End			Unit: N Sec.: 1 Twp.: 18S Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single Gas		Packer Set At: 9805'	County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 148 @ 10,120	Mean Annual Temp. °F: 72	Baro. Press. – P_a: 13.2
State: New Mexico			

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9949	9949	.660	.43	.42	----		3.068	Flg.

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	S.I.				2380				72 Hr.
1.	3 X 1.125	426.8	4	51	2175		Pkr.		1 Hr.
2.	3 x 1.125	446.8	11	51	2070		Pkr.		1 Hr.
3.	3 x 1.125	446.8	32	51	1900		Pkr.		1 Hr.
4.	3 x 1.125	426.8	72	45	1605		Pkr.		1 Hr.
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	6.217	41.952	440	1.009	1.225	1.048	337
2.	6.217	71.134	460	1.009	1.225	1.051	574
3	6.217	121.326	460	1.009	1.225	1.051	980
4.	6.217	177.989	440	1.015	1.225	1.051	1446
5							

NO.	P_t	Temp. °R	T_r	Z
1	.65	511	1.37	.910
2.	.68	511	1.37	.906
3.	.68	511	1.37	.906
4.	.65	505	1.35	.905
5				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: _____ Deg.
Specific Gravity Separator Gas: .660 | XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 673 P.S.I.A. | _____ P.S.I.A.
Critical Temperature: 374 R | _____ R

P_c 2472 P_c^2 6110.7

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2264	5125	985.7
2		2147	4609	1501.7
3		1966	3865	2245.7
4		1639	2686	3424.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.784$

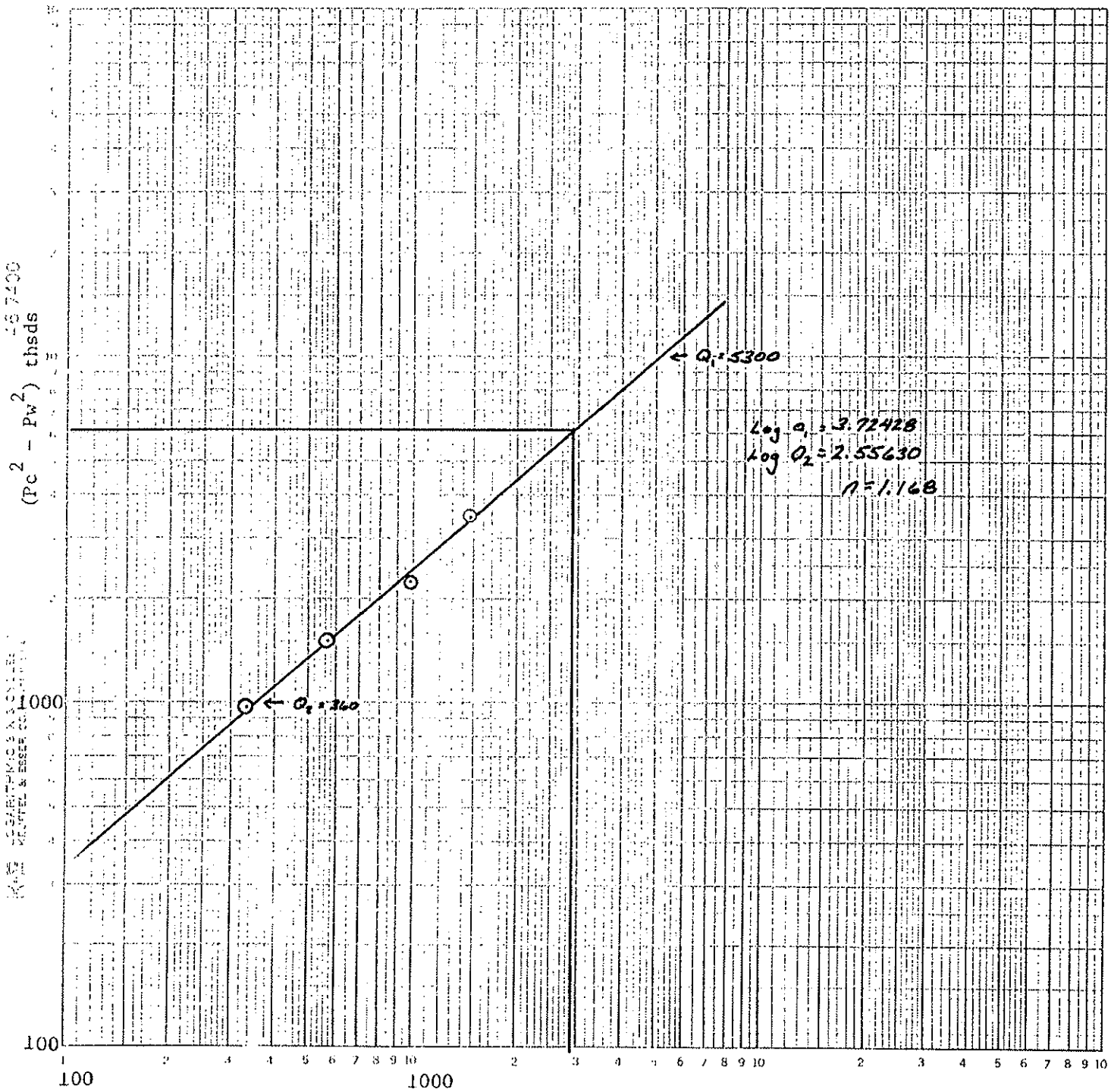
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.967$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.844$

Absolute Open Flow: 2,844 Mcfd @ 15.025 | Angle of Slope θ: 41° | Slope, n: 1.168

Remarks: Well made 0 bbl. fluid during test

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Greg Milner	Greg Milner	Bill Pierce


$(Pc^2 - Pw^2)$ thsds
1000
100
100
1000
Q MCF/D
← Q_1 = 5300
← Q_2 = 360
Log a_1 = 3.72428
Log Q_2 = 2.55630
n = 1.168

AOF = 2.9 MMCF/D

Laboratory Services

1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR:	Mewbourne Oil Co. Attention: Mr, Greg Milner P. O. Box 5270 Hobbs, New Mexico 88241	SAMPLE IDENTIFICATION:	Chalk Bluff Federal #1
		COMPANY:	Mewbourne Oil Co.
		LEASE:	
		PLANT:	

SAMPLE DATA:	DATE SAMPLED:	03-15-91	GAS (XX)	LIQUID ( )
	ANALYSIS DATE:	03-18-91	SAMPLED BY:	Gregory Milner
	PRESSURE - PSIG	460.00	ANALYSIS BY:	Rolland Perry
	SAMPLE TEMP. °F	51.00		
	ATMOS. TEMP. °F			

REMARKS:

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Oxygen	(O2)		
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	0.42	
Carbon Dioxide	(CO2)	0.43	
Methane	(C1)	87.54	
Ethane	(C2)	7.07	1.886
Propane	(C3)	2.38	0.654
I-Butane	(IC4)	0.31	0.100
N-Butane	(NC4)	0.54	0.169
I-Pentane	(IC5)	0.20	0.071
N-Pentane	(NC5)	0.14	0.052
Hexane	(C6)	0.97	0.399
Heptanes Plus	(C7+)	0.00	0.000
		100.00	3.331

BTU/CU.FT. - DRY	1156	MOLECULAR WT	19.0972
AT 14.650 DRY	1153		
AT 14.650 WET	1133	26# GASOLINE -	0.578
AT 15.025 DRY	1182		
AT 15.025 WET	1162		
SPECIFIC GRAVITY -			
CALCULATED	0.660		
MEASURED	0.000		

WORK SHEET FOR CALCULATION OF WELL HEAD PRESSURES (P_c or [illegible])

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or [illegible])

Form C-122F
Adopted 9-1-65

COMPANY Mewbourne Oil LEASE Chalk Bluff Fed. WELL NO. 1 DATE 3-18-91

LOCATION: Unit _____ Section 1 Township 18S Range 27E

9949 H 9949 L/H 1.000 G .660 % CO_2 .43 % N_2 .42 % H_2S —

GH 6566 P_{cr} 673 (TABLE IX & X) T_{cr} 374 (TABLE IX & X)

LINE		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	532	532						
2	T_s(B.H. °R)	608	608						
3	$T=(\frac{T_w + T_s}{2})$	570	570						
4	Z (Est.)	.800	.790						
5	TZ	456.0	450.4						
6	GH/TZ	14.399	14.578						
7	e^s(Table XIV)	1.716	1.727						
8	P_f or [illegible]	3249	3249						
9	P_f^2 or [illegible]	10556	10556						
10	$P_c^2 = P_f^2/e^s$ or [illegible]	6151.7	6110.6						
11	P_c or [illegible]	2480.3	$\boxed{2472.0}$	$= P_c$					
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	2864.6	2860.5						
13	$P_r = (P/P_{cr})$	4.26	4.25						
14	$T_r = (T/T_{cr})$	1.52	1.52						
15	Z (Table XI)	.790	.790						

One copy to be filed in District Office (Work copy acceptable)

WORK SHEET FOR CALCULATION OF WE. .IEAD PRESSURES (~~P~~ or P_w)

FROM KNOWN BOTTOM HOLE PRESSURE (~~P~~ or P_s)

Form C-1221
Adopted 9-1-65

COMPANY Mewbourne LEASE Chalk Bluff Fed. WELL NO. 1 DATE 3-18-91

LOCATION: Unit _____ Section 1 Township 18S Range 27E

L 9949 H 9949 L/H 1.00 G .660 % CO_2 .43 % N_2 .42 % H_2S —

GH 6566 P_{cr} 673 (TABLE IX & X) T_{cr} 374 (TABLE IX & X)

LINE		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	532	532	532	532	532	532	532	532
2	T_s(B.H. °R)	608	608	608	608	608	608	608	608
3	$T=(\frac{T_w + T_s}{2})$	570	570	570	570	570	570	570	570
4	Z (Est.)	.835	.783	.783	.781	.781	.780	.780	.792
5	TZ	476.0	446.5	446.5	445.1	445.2	444.8	444.6	451.7
6	GH/TZ	13.796	14.704	14.712	14.753	14.749	14.761	14.768	14.537
7	e^s(Table XIV)	1.678	1.736	1.736	1.739	1.739	1.739	1.740	1.725
8	~~P~~ or P_s	2983	2983	2831	2831	2593	2593	2152	2152
9	~~P~~ or P_s^2	8898.3	8898.3	8014.6	8014.6	6723.6	6723.6	4631.1	4631.1
10	~~P~~ $= P_f^2/e^s$ or $P_w^2 = P_s^2/e^s$	5304.3	5126.6	4616.2	4609.0	3867.2	3865.5	2661.7	2684.9
11	~~P~~ or P_w	2303.1	2264.2	2148.5	2146.9	1966.5	1966.1	1631.5	1638.6
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	2643.1	2623.6	2489.8	2488.9	2279.8	2279.5	1891.7	1895.3
13	$P_r = (P/P_{cr})$	3.93	3.90	3.70	3.70	3.39	3.39	2.81	2.82
14	$T_r = (T/T_{cr})$	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
15	Z (Table XI)	.783	.783	.781	.781	.780	.780	.792	.792

One copy to be filed in District Office (Work copy acceptable)

COMPANY: PRO WIRELINE

CLIENT: MEWBOURNE OIL

GAUGE NUMBER: 12235

WELL NAME: CHALK BLUFF

WELL NUMBER: 1

TEST NUMBER: 1

LOCATION:

TEST OPERATOR: BURRELL

COMMENTS: 4 POINT FLOW TEST RAN
AFTER 72 HOUR BUILD UP

POSITION	GAUGE SERIAL NUMBER
1	
2	
3	
4	

AGE START DATE: 3/15/91 GAUGE S/N: 12235

DATA FILE: 3

REAL TIME	DELTA TIME HRS	PRESSURE PSIA	TEMPERATURE °F	COMMENTS
9:45: 0	0.0000	3213.00		START RATE 1
10: 0: 0	0.2500	3046.00		
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10:30: 0	0.7500	2983.00		START RATE 2
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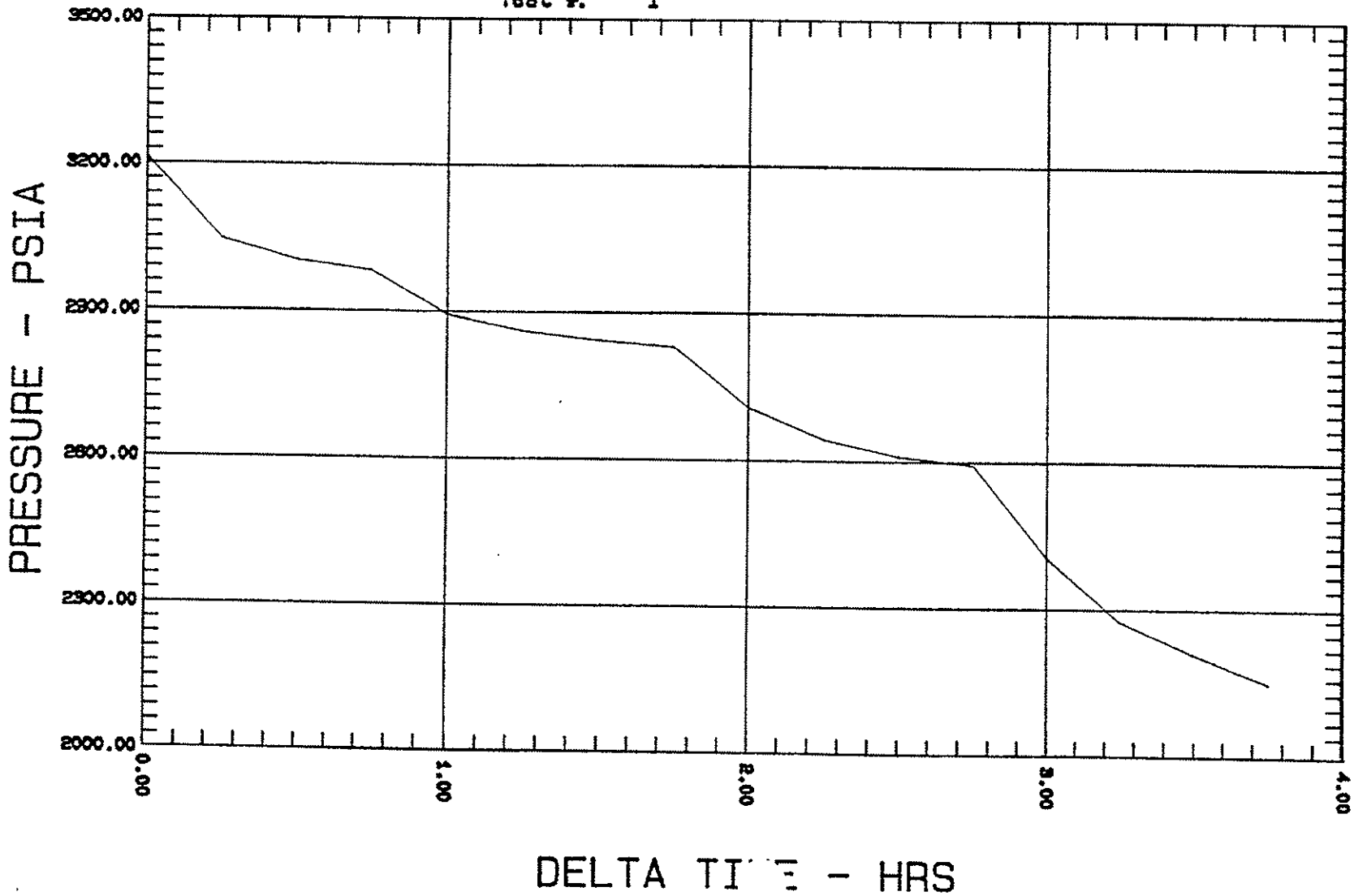
12:45: 0	3.0000	2405.00		
13: 0: 0	3.2500	2276.00		
13:15: 0	3.5000	2210.00		
13:30: 0	3.7500	2152.00		END OF TEST

Plot starting date: 3/15/91
time: 9: 45: 0

Gauge S/N

Company: PRO WIRELINE
Client: MEWBOURNE OIL
Well name: CHALK BLUFF
Well #: 1
Test #: 1

Location:
Operator: BURRELL
Comments: 4 POINT FLOW TEST RAN AFTER 72 HOUR BUILD UP



Form 3160-5
ne 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
SEP 28 1992
O. C. D.
ARTESIA, OFFICE

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

1. Type of Well
☐ Oil Well ■ Gas Well ☐ Other

8. Well Name and No.
Chalk Bluff Fed.Com.#1

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-015-26575

3. Address and Telephone No.
P. O. Box 7698, Tyler, Texas 75711 (903) 561-2900

10. Field and Pool, or Exploratory Area
N.Illinois Camp-Mor.-Gas

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2250' FWL & 790' FSL Sec. 1, T18S-R27E

11. County or Parish, State
Eddy

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
■ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	■ Other Additional perfs, acidize & frac	☐ Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

8/13/92 - Perf Middle Morrow 9861-9882', 2 SPF, 10' Net, 22 holes.

8/14/92 - Acidized w/3500 gals 7½% HCL + additives + 1000 SCF/bbl nitrogen carrying 80 ball sealers. Flushed w/2% KCL wtr + 1000 SCF/bbl nitrogen. ISDP 4300#, 5 mins 3800#, 10 mins 3400#, 15 mins 2800#. Avg rate 3.7 BPM, AP 5000#, MP 5600#. Blew well down to pit 8/15 - 8/18/92.

8/19/92 - MI swab unit. Pressure tested tbg to 2000#.Held OK. Removed tree. RU BOP. RU swab. Swabbed well down to 5300'.

8/20/92 - Swabbed down to 6500'. POOH w/tbg & pkr. TIH w/new pkr assembly & 200 jts tbg. Tested tbg to 8000#. 8/21/92 - Continued testing tbg. Set pkr @ 9740.68' w/15 pts compression. Press annulus to 2000#. Held OK. Started swabbing. Had light blow of gas.

8/22/92 - RU Western Co. Acidized perfs w/1500 gals 7½% HCL acid + additives + 1000 scf/bbl nitrogen + 35 ball sealers. Flushed w/2% KCL wtr. ISDP 400#. 5 min 3700#, 10 min 3700#, 15 min 3600#. ATP 5100#, MTP 5400#. RD Western. Opened well to pit on 12/64" choke. No show of gas or oil. Recovering load.

8/23/92 - RU swab. FL @ 7000'. Swabbed dry in 3 runs. Continued swabbing. Recovering load.

14. I hereby certify that the foregoing is true and correct

Signed [signature] Title Engr. Oprns. Secretary Date 9/11/92

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

Form 3160-4
(November 1983)
(formerly 9-330)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

CONFIDENTIAL

RECEIVED JUL 23 1992 O. C. D. ARTESIA, OFFICE

2. NAME OF OPERATOR: Mewbourne Oil Company

3. ADDRESS OF OPERATOR: P. O. Box 7698, Tyler, Texas 75711

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements): At surface 2250' FWL & 790' FSL

At top prod. interval reported below

At total depth Same

5. LEASE DESIGNATION AND SERIAL NO.: NM-0557371

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME: Chalk Bluff Federal Com

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: N. Illinois Camp Morrow

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 1-T18S-R27

14. PERMIT NO. / DATE ISSUED: API #30-015-26575

12. COUNTY OR PARISH: Eddy

13. STATE: N.M.

15. DATE SPUDDED: 12/22/90

16. DATE T.D. REACHED: 1/29/91

17. DATE COMPL. (Ready to prod.): 3/07/91

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: KB 3625', GM 3609'

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD: 10,120'

21. PLUG, BACK T.D., MD & TVD: 10,079'

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY: → ROTARY TOOLS: X CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 9936-46', 9964-67' - Morrow

25. WAS DIRECTIONAL SURVEY MADE: Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN: SDL-DSN, DLL-MSFL, DILL

27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.50#	400'	17-1/2"	425 - Circ	None
9-5/8"	36#	2604'	12-1/4"	1025 - Circ	None
7"	26# & 29#	9450'	8-3/4"	1350 - Circ	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
4-1/2"	9051'	10119'	175	

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	9805'	9805'

31. PERFORATION RECORD (Interval, size and number)
9936-46', 9964-67'
13', 2 SPF, Total 28

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
9936-67'	3000 gals Mod-101 acid + 1000 SCF/bbl N2 + 50 ball sealers, Flushed w/35 bbls 2% KCL water + 1000 SCF/bbl N2.

33.* PRODUCTION

DATE FIRST PRODUCTION: | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): Flowing | WELL STATUS (Producing or shut-in): Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3/11/91	24 hrs	8/64"	→	1	886	0	886:1

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
1600#		→	1	886	0	58

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): Sold

TEST WITNESSED BY: W. Hoover

35. LIST OF ATTACHMENTS: Logs

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Dayna Thompson TITLE Engr. Oprns. Secretary DATE 3/18/91

ACCEPTED FOR RECORD
SAS
APR 1 1991
CARLSBAD, NEW MEXICO

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries)

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Lower Morrow	9936'	9967'	Sandstone
Middle Morrow	9861'	9881'	Sandstone

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Yates	424'	
Queen	1138'	
Grayburg	1484'	
San Andres	1976'	
Glorietta	3458'	
Tubb	4451'	
Drinkard	5376'	
Abo	5794'	
Wolfcamp	6420'	
Cisco	7666'	
Canyon	8368'	
Strawn	8844'	
Morrow	9454'	
Morrow Clastics	9770'	
Barnett	10016'	

Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-104
Revised 1-1-89
See Instructions
at Bottom of Page

c/5F
WL
GT
DP

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator	Well API No.
MEWBOURNE OIL COMPANY ✓	30-015-26575
Address: P. O. Box 7698, Tyler, Texas 75711	

Reason(s) for Filing (Check proper box)
- New Well [X]
- Recompletion [ ]
- Change in Operator [ ]
- Change in Transporter of: Oil [ ] Dry Gas [ ] Casinghead Gas [ ] Condensate [ ]
- Other (Please explain) [ ]

If change of operator give name and address of previous operator _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
CHALK BLUFF FEDERAL	1	North Illinois Camp Morrow	State, Federal or Fee	NM-0557371

Location: Unit Letter N : 2250 Feet From The West Line and 790 Feet From The South Line

Section 1 Township 18 South Range 27 East NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil or Condensate	Address (Give address to which approved copy of this form is to be sent)
Amoco Pipeline Inter-corporate Trucking [ ] or [X]	Oil Tender Dept.Box 702068,Tulsa,OK 74170-2068
Name of Authorized Transporter of Casinghead Gas or Dry Gas	Address (Give address to which approved copy of this form is to be sent)
Transwestern Pipeline Company [ ] or [X]	P.O.Box 1188, Houston, Texas 77251-1188

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When ?
	N	1	18S	27E	Yes	March, 1991

If this production is commingled with that from any other lease or pool, give commingling order number: No

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
		X	X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
12/22/90	3/07/91	10,120'	10,079'
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
KB 3625', GR 3609'	Morrow	9936'	9,805'

Perforations: 9936-46', 9964-67', 13',2 SPF,Total 28

Depth Casing Shoe: ----

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17-1/2"	13-3/8"	400'	425 Circ 20-2
12-1/4"	9-5/8"	2604'	1025 5-12-91
8-3/3"	7"	9450'	1350 temp BK
7"	4-1/2" Liner	10119'	175

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL *(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)*

Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas- MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
886	.24 hours	1	58°
Testing Method (pitot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
Back Pressure	1600#	----	8/64"

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Gaylon Thompson
Signature

Gaylon Thompson, Engineering Operations
Printed Name / Title

March 11, 1991 (903) 561-2900
Date / Telephone No.

OIL CONSERVATION DIVISION

Date Approved MAY 1 6 1991

By ORIGINAL SIGNED BY MIKE WILLIAMS

Title SUPERVISOR, DISTRICT II

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

1) Request for allowable for newly drilled or deepened well must be accompanied by tabul[illegible] with Rule 111.
2) All sections of this form must be filled out for allowable on new and recompleted [illegible]
3) Fill out only Sections I, II, III, and VI for changes of operator, well name or [illegible]
4) Separate Form C-104 must be filed for each pool in multiply completed wells.

[redacted]

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OIL CONS COMMISS
Drawer DD
Artesia, NM 88210

C/SF

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
8. Well Name and No.: Chalk Bluff Fed. Comm. #1
9. API Well No.: 30-015-26575
10. Field and Pool, or Exploratory Area: N. Illinois Camp Morrow
11. County or Parish, State: Eddy Co., N.M.

1. Type of Well: ☐ Oil Well ■ Gas Well ☐ Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2250' FWL & 790' FSL Sec. 1-T18S-R27E Unit N

12. **CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION	
■ Notice of Intent	■ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

- Spot 8 sx. (50') cement plug on top of existing CIBP @ 7010'. Circulate hole with plug mud.
- Spot 17 sx. (100') cement plug @ 2650'.
- Spot 17 sx. (100') cement plug @ 450'.
- Cut off and remove wellhead.
- Spot 8 sx. (50') surface plug.
- Install cup and dry hole marker.
- Clean location.

RECEIVED
AUG 18 1995
OIL CON. DIV.
DIST. 2

JUN 7 10 AM '95
RECEIVED

14. I hereby certify that the foregoing is true and correct
Signed [signature] Title Engineer Date 5/25/95

(This space for Federal or State office use)
Approved by Orig. Signed by Shannon J. Shaw Title PETROLEUM ENGINEER Date 8/14/95
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instructions on Reverse Side

OCD - Artesia

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-0557371

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ☐ Gas Well ☒ Other

2. Name of Operator: Mewbourne Oil Com[any

3. Address and Telephone No.: PO Box 5270, Hobbs, NM 505-393-5905

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 790' FSL & 2250' FWL, Sec.1 T-18S R-27E

8. Well Name and No.: Chalk Bluff Federal Comm #1

9. API Well No.: 30-015-26575

10. Field and Pool, or Exploratory Area: N. Illinois Camp Morrow

11. County or Parish, State: Eddy, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other Extend T/ A & CIT.	☐ Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

Describe Proposed or Completed Operations (Clearly state all pertinet details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markders and zones pertinent to this work.)*

The above caption well is currently under T/A status. Mewbourne Oil Company would like to extend this status. The well has a 7" CIBP above all perfs @ 7010'. We are considering converting this well into a SWD. At this time, Mewbourne would like to schelude a CIT (500 psi) & after passing, extend T/A status for an additional time.

If any question, please call.

NOV 2000 RECEIVED OCD - ARTESIA

TA Approval for 12 Month Period
Ending 10/25/2001

RECEIVED 2000 OCT 10 P 2:34 BUREAU OF LAND MGMT. CARLSBAD RESOURCE AREA

14. I hereby certify that the foregoing is true and correct

Signed N.M. Young Title N.M. Young District Manager Date 10/06/00

(This space for Federal or State office use)

Approved by (ORIG. SGD.) JOE G. LARA Title Petroleum Engineer Date 11/6/2000

Conditions of approval, if any:

'e 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent ements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

C/SF

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division
811 S. 1st Street
Artesia, NM 88210-2834

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NM-0557371

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other

8. Well Name and No.
Chalk Bluff Federal Comm #1

2. Name of Operator
Mewbourne Oil Com[any

9. API Well No.
30-015-26575

3. Address and Telephone No.
PO Box 5270, Hobbs, NM 505-393-5905

10. Field and Pool, or Exploratory Area
N. Illinois Camp Morrow

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
790' FSL & 2250' FWL, Sec.1 T-18S R-27E

11. County or Parish, State
Eddy, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
☐ Final Abandonment Notice	☐ Altering Casing	☐ Conversion to Injection
	☒ Other MIT	☐ Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinet details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markders and zones pertinent to this work.)*

The above caption well was successfully MIT'ed on 10/25/2000. (500 psi for 30 min.)
The pressure chart is enclosed.
If any question, please call.

ACCEPTED FOR RECORD
NOV 15 2000
43
BLM

RECEIVED
OCD - ARTESIA

14. I hereby certify that the foregoing is true and correct

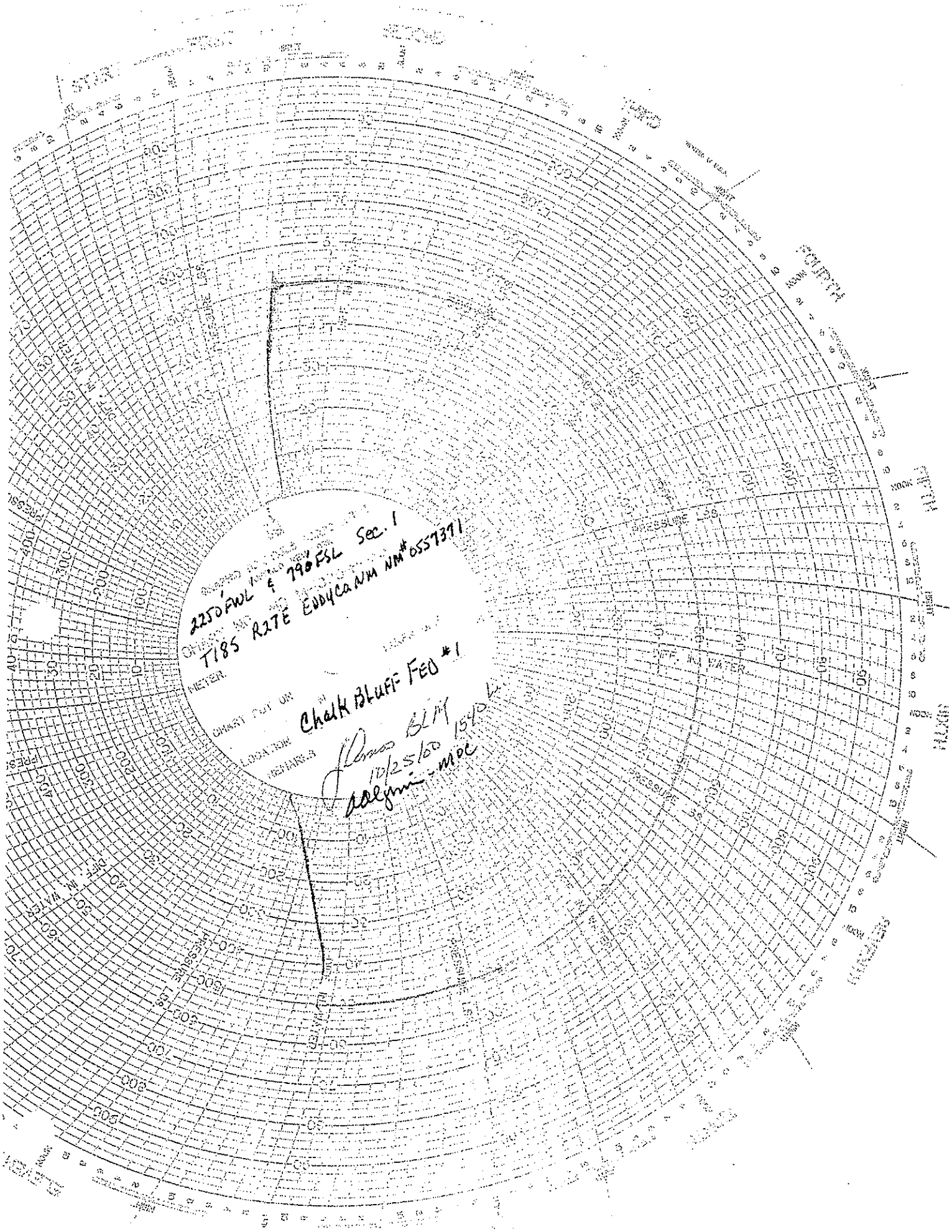
Signed [signature] Title N.M. Young District Manager Date 11/01/00

(This space for Federal or State office use)

Approved by Record Only Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side


2250' FWL & 790' FSL Sec. 1
T18S R27E Eddy Co NM NM# 0557371
METER
CHART PUT ON
LOCATION
REMARKS
Chalk Bluff FED #1
10/25/00
PRESSURE LBS
OFF IN WATER

NM OIL CONS COMMISSION
Drawer DD
Artesia, NM 88210

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

FEB 21 1994

1. Type of Well: ☐ Oil Well ■ Gas Well ☐ Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2250' FWL & 790' FSL Sec. 1-T18S-R27E
5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
8. Well Name and No.: Chalk Bluff Fed. Com. #1
9. API Well No.: 30-015-26575
10. Field and Pool, or Exploratory Area: N. Illinois Camp
11. County or Parish, State: Eddy Co., N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
■ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	■ Other Shut-In-Status	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Mewbourne Oil Company here by requests temporarily abandon status pending further evaluation of the lease for the above well. The well was spudded 12/22/90.

APPROVED FOR 12 MONTH PERIOD
ENDING 1/25/95

14. I hereby certify that the foregoing is true and correct
Signed Robert G. Jones Title Petroleum Engineer Date 01/25/94

(This space for Federal or State office use)
Approved by (ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 2/16/94
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

dsf

Form 3160-3
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

NOV 17 1993
O. C. D.

8. Well Name and No.
Chalk Bluff Fed. Comm. #1

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-015-26575

3. Address and Telephone No.
P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905

10. Field and Pool, or Exploratory Area
N. Illinois Camp

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2250' FWL & 790' FSL of Sec. 1-T18S-R27E

11. County or Parish, State
Eddy Co., N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[X] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[X] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

* Verbal from Adam Salameh

9/10/93 Abandon Morrow formation. Set CIBP @ 9800' & cover w/35' cement.
9/11/93 Perforate Cisco from 7826'-7830'. Test & evaluate.
9/12/93 Squeeze Cisco from 7826'-7830' w/600 sx. Class "C".
9/15/93 Drill out squeeze perfs. to 7792'. Squeeze held 2,000#.
9/16/93 Perforate Cisco from 7676'-7678'. Test and evaluate.
9/17/93 Abandon Cisco formation, set CIBP @ 7600' & cover w/35' cement.
9/18/93 Perforate Wolfcamp 7304'-7314'. Test & evaluate.
9/19/93 Acidize Wolfcamp w/1500 gal. 15% NE-FE from 7304'-7314'.
9/21/93 Set CIBP @ 7294' & perforate Wolfcamp from 7262'-7278'. Test & evaluate.
9/22/93 Acidize Wolfcamp w/2000 gal. 15% NE-FE from 7262'-7278'.
9/23/93 Set CIBP @ 7208' & perforate Wolfcamp from 7050'-7102'. Test & evaluate.
9/24/93 Acidize Wolfcamp w/2000 gal. 15% NE-FE from 7050'-7102'.
9/25/93 Set CIBP @ 7010'.

14. I hereby certify that the foregoing is true and correct
Signed Robert G. Jones Title Petroleum Engineer Date 10/05/93

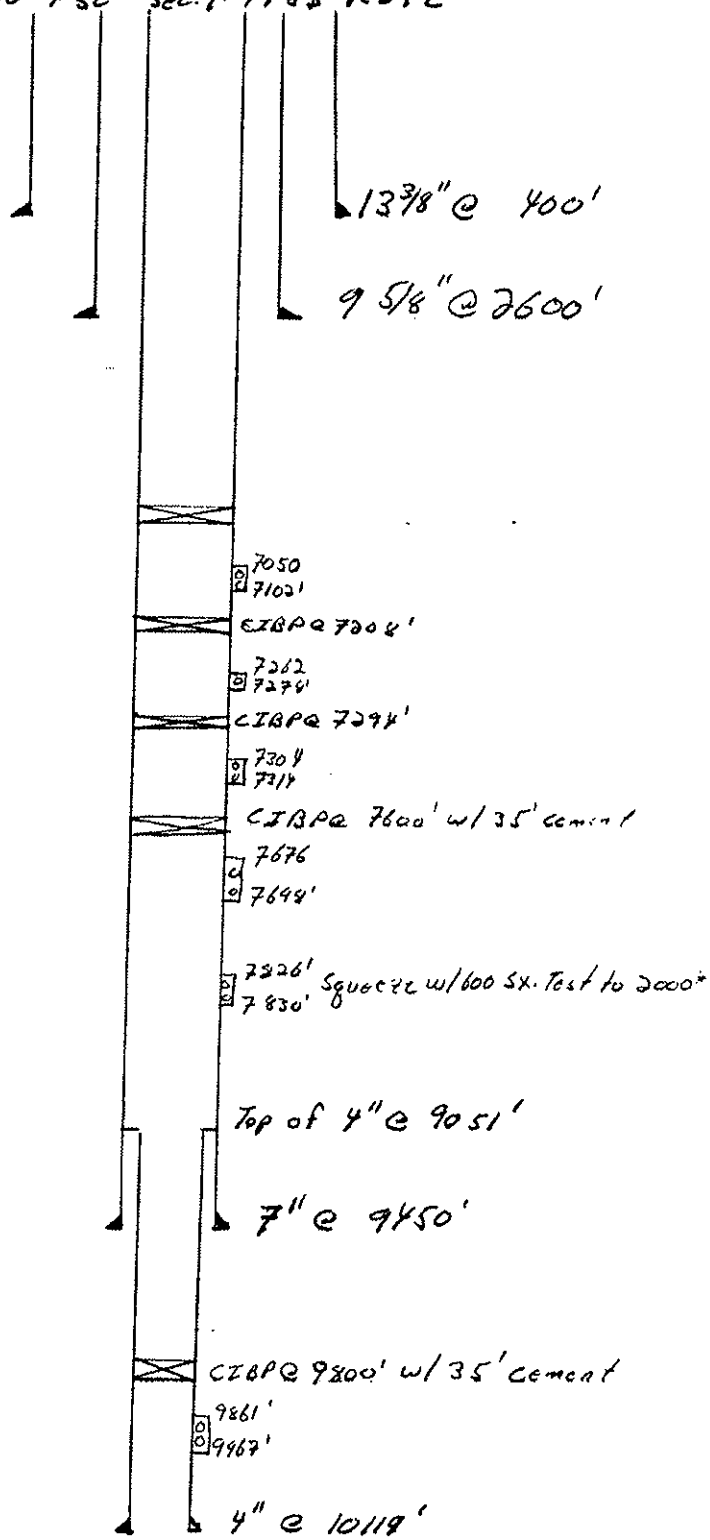
(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

ACCEPTED FOR RECORD
NOV 15 1993
CARLSBAD, NEW MEXICO

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instructions on Reverse Side

Newbourne Oil Company
Chuck Bluff Federal #1
2250' FWL & 790' FSL Sec. 1-T18S-R27E



C/SF

3160-5
1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

RECEIVED
OCT 19 1993
O.C.D.

5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:

1. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2250' FWL & 790' FSL of Sec. 1-T18S-R27E
8. Well Name and No.: Chalk Bluff Fed. Com. #1
9. API Well No.: 30-015-26575
10. Field and Pool, or Exploratory Area: N. Illinois Camp
11. County or Parish, State: Eddy Co., N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
	[X] Recompletion	[ ] New Construction
[ ] Subsequent Report	[X] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
[ ] Final Abandonment Notice	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

09/08/93 Abandon Morrow Perfs 9861' - 9967'

- Set CIBP @ 9800' - cover w/35' cement.
- Recomplete in Cisco Formation - Test & evaluate.
- If unecomomical recomplete in Wolfcamp - Test & evaluate.

RECEIVED
SEP 22 10 43 AM '93
CARL
AREA

14. I hereby certify that the foregoing is true and correct

Signed R. G. Jones Title Petroleum Engineer Date 09/07/93

(This space for Federal or State office use)

Approved by (ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 10/15/93
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

30-015-26575

Ogrid- 14744

Property- 7876

Pool- 78890

3-19-91

DUAL LAT.

2595-9446
9330-10112
DUAL SPACED
NEUTRON

Surf 9417
8500-10121

3-19-91

DUAL LAT.

2595-9446
9330-10112
DUAL SPACED
NEUTRON

Surf 9417
8500-10121

NC Tops DEM 5/14/91

Queen	1140
Grayburg	1630
San Andres	1975
Glorieta	3598
Abo	>
Wolfcamp	6860
Penn	
Strown	
Atoka	9435
Morrow	9703

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

31 January 2003

File Copy

Navajo Refining Co.
P. O. Box 159
Artesia, New Mexico 88211

RE: Chalk Bluff Federal Com # 1 N-1-18-27 API 30-015-26575 Violation of Rule 201: Idle Well

Dear Sirs:

This second directive is to notify you that this well is still in violation of Rule 201.

On 12 December, 2002 a letter was sent notifying you on the violation of Rule 201. On 3 January, 2003 the form C-104 was faxed to you indicating Navajo Refining was the operator of this well. To date no action has been taken.

Rule 201 of the New Mexico Oil Conservation Division provides as follows:

201 WELLS TO BE PROPERLY ABANDONED
201.A. The operator of any well drilled for oil, gas or injection; for seismic, core or other exploration, or for a service well, whether cased or uncased, shall be responsible for the plugging thereof. [7-12-90...2-1-96]
201.B. A well shall be either properly plugged and abandoned or temporarily abandoned in accordance with these rules within ninety (90) days after:
(1) A sixty (60) day period following suspension of drilling operations, or
(2) A determination that a well is no longer usable for beneficial purposes, or
(3) A period of one (1) year in which a well has been continuously inactive.
[7-12-90...2-1-96]

In the event that a satisfactory response is not received to this letter of direction by 15 March, 2003, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of **CIVIL PENALTIES** for your violation of OCD rules.

Sincerely,

Van Barton
Field Rep. II

To:

Shirley Jones – *CRUDE OIL SUPPLY CLERK*
LEASE RECORDS
Navajo Refining Company
P.O. Box 159
Artesia, NM 88211-0159
phone (505) 746-5325
fax (505) 746-5283
shirleyj@navajo-refining.com (please note the "j" after shirley)

TO:	District II	*COMPANY:*	Oil Conservation Division
FAX:	505-748-9720	*PHONE:*	505-748-1283
RE:	Chalk Bluff Federal Com #1 API No. 30-015-26575		

MESSAGE:

We have received the enclosed letter from you showing that Navajo Refining Company is the operator for the above referenced lease.

Navajo Refining Company is neither the operator, transporter or purchaser on this lease. Your Internet site shows Mewbourne Oil Company to be the operator.

We do have them as an operator on some of the leases that we transport. But this lease is not one of them.

We have contact information for them of: PO Box 7698, Tyler, TX 75711, with a New Mexico phone for Jerry Elgin of 505-393-5905.

If you have other information that shows Navajo Refining Company as the operator, would you please forward a copy to me so that I may research it further.

Thank you.

Shirley Jones

-Shirley Jones

Shirley – Please note the attached document signed by Darrell Moore.

Jerry

District I
1625 N. French Dr., Hobbs, NM 88240
District II
South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-104A
August 11, 2000

Submit copy of the final affected wells listing with 2 copies of this form per number of wells on that list to appropriate District Office

Change of Operator

Previous Operator Information:

OGRID: 14744
Name: Mewbourne Oil Company
Address: P. O. Box 7698
Address:
City, State, Zip: Tyler, TX 75711

New Operator Information:

Effective Date: 5 October, 2000
New Ogrid: 15694
New Name: Navajo Refining Company
Address: ~~100 Crescent Court, Ste 1600~~
Address: P.O. Box 159
City, State, Zip: ~~Dallas, TX 75201~~
Artesia, NM 88211

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the attached list of wells is true and complete to the best of my knowledge and belief.

New Operator
Signature: Darrell Moore
Printed name: Darrell Moore
Title: Env. Mgr. for Water and Waste
Date: 12/5/00 Phone: 505-748-3311

Previous operator complete below:

Previous Operator: Mewbourne Oil Company
Previous OGRID: 14744
Signature: Monty Whetstone
Printed Name: Monty Whetstone

NMOCD Approval

Signature: Jim W. Gum
Printed Name: District Supervisor
District:
Date: NOV 27 2000

27021 - property code - Chalk Bluff Federal Com #1
1-18S-27E
30-015-26575 - API Number

Form 3160-5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Oil Cons.
N.M. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

FORM APPROVED
OMB No. 1004-0135
Expires: January 31, 2004

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ Other TEMPORARILY ABANDONED

8. Well Name and No.
WDW-3 #3 23592

2. Name of Operator
NAVAJO REFINING COMPANY 15694

9. API Well No.
30-015-26575

3a. Address
PO BOX 159, ARTESIA, NM 88211

3b. Phone No. (include area code)
505-748-3311

10. Field and Pool, or Exploratory Area
NAVAJO INJECTION; PERMO-PENN

4. Location of Well (Footage, Sec., T, R., M., or Survey Description)
790' FSL, 2250' FWL, 1-18S-27E

11. County or Parish, State
EDDY

RECEIVED
OCT 2003
OCD - ARTESIA

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other RECOMPLETE AS CLASS I INJECTION WELL
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☑ Water Disposal	

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.) change well name per Darrell Moore

Original well name was CHALK BLUFF FEDERAL COM. NO. 1

SUBJECT TO LIKE APPROVAL BY NMOCD

DRILL OUT BRIDGE PLUG AT 7010' AND CLEAN OUT TO 7208'.
INJECTION-TEST PERFORATIONS AT 7050' - 7102', 7262' - 7278' TO PLAN SQUEEZE-CEMENT JOB.
DRILL OUT BRIDGE PLUGS AT 7208' AND 7294'. CLEAN OUT HOLE THROUGH PERFS AT 7304'-7314'.
SQUEEZE-CEMENT PERFORATIONS AT 7050' - 7102', 7262' - 7278', AND 7304' - 7314'.
DRILL OUT BRIDGE PLUG AT 7600' AND CLEAN OUT TO TOP OF LINER AT 9051'.
RUN CBL/VDL AND CALIPER FROM 9051' TO SURFACE.
PERFORATE 8540' - 8620' AND 7660' - 8450'.
RUN INJECTIVITY TEST, AND ACIDIZE IF NECESSARY.
RUN INJECTION/FALLOFF TEST.
RUN DIFFERENTIAL TEMPERATURE SURVEY.
RUN RADIOACTIVE TRACER SURVEY.
INSTALL INJECTION TUBING AND PACKER TO APPROX. 7600'.
INSTALL WELL ANNULUS MONITORING EQUIPMENT, AND PREPARE WELL FOR INJECTION.

APPROVED
SEP 29 2003
LES BABYAK
PETROLEUM ENGINEER

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed) Darrell Moore
Title Env. Mgr. for Water Waste
Signature Darrell Moore
Date 9/17/03

Approved by (Signature)
Name (Printed/Typed)
Title
Office
Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

~~Accepted for record - NMOCD~~

(Continued on next page)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30 - 015 -26575		Navajo Injection; Permo-Penn

[4] Property Code	[5] Property Name	[6] Well Number
23592	WDW	3

[7] OGRID No.	[8] Operator Name	[9] Elevation
15694	Navajo Refining Company	3609' GL; 3625' KB

[10] Surface Location

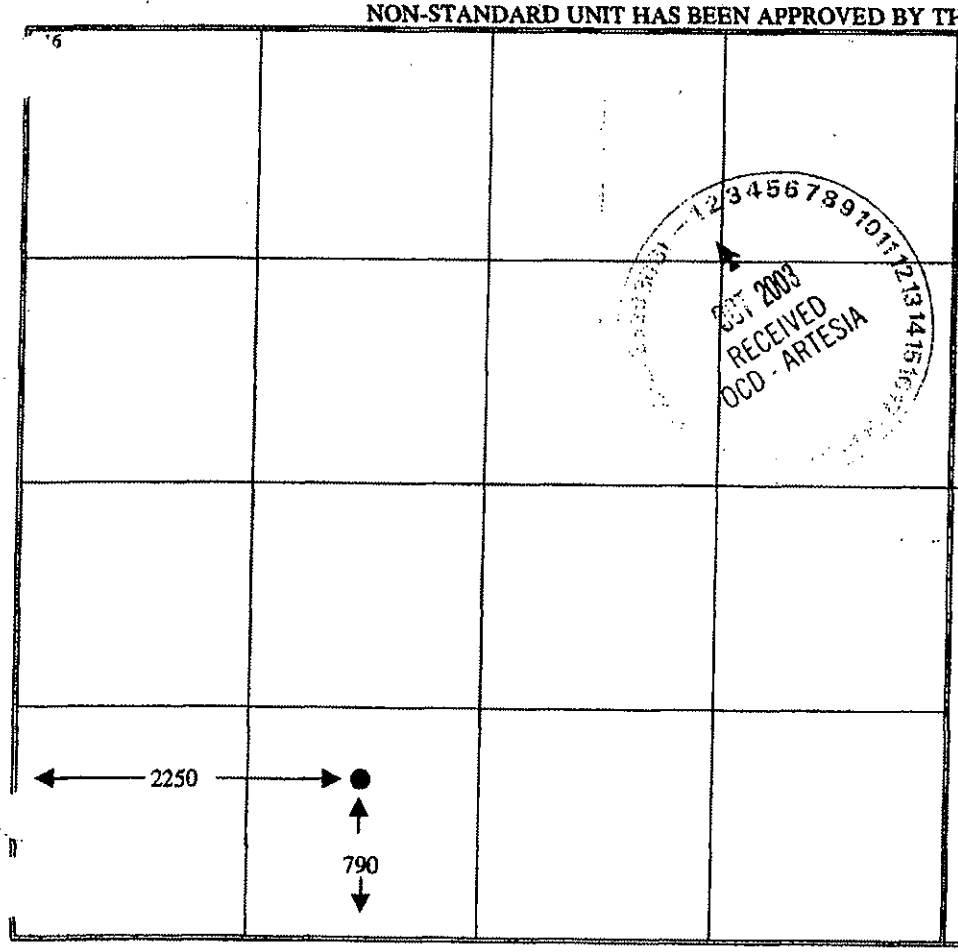
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	1	18S	27E		790	South	2250	West	Eddy

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: Darrell Moore

Printed Name: Darrell Moore

Title and E-mail Address: Env. Mgr. for Water & Waste darrell@navajo-refining.com

Date: 9/17/02

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

Accepted for record - NMOCD

REENTRY PROCEDURE

NAVAJO REFINING COMPANY'S WDW-3 (PROPOSED)

790'FSL and 2250' FWL, Section 1, T18S, R27E
Eddy County, New Mexico
Chalk Bluff Federal Com. No. 1, API No. 30-015-26575

All depths are in feet below well's original kelly bushing height (RKB) of 16 feet above ground level. The original KB elevation is 3625 feet above mean sea level. The ground level elevation is 3609 feet above mean sea level.

Tops of Geologic Formations (from RKB)

The base of the lowermost USDW is at 420 feet.

San Andres	1976 feet	Lower Wolfcamp	7303 feet
Yeso	4030 feet	Cisco	7650 feet
Abo	5380 feet	Canyon	8390 feet
Wolfcamp	6745 feet	Strawn	8894 feet

Depth of Plugs

7010 feet in 7-inch casing above perforations 7050 feet to 7102 feet
7208 feet in 7-inch casing above perforations 7262 feet to 7278 feet
7294 feet in 7-inch casing above perforations 7304 feet to 7314 feet
7600 feet in 7-inch casing above perforations 7676 feet to 7678 and 7826 feet to 7830 feet
9800 feet in 4-1/2-inch liner above perforations 9861 feet to 9967 feet

Anticipated Formation Pressure

The expected bottom-hole pressure is 3448 pounds per square inch absolute (psia) at 9000 feet, for a gradient of 0.383 pounds per square inch (psi) per foot, or an equivalent

Accepted for record - NMOCD

mud weight of 7.36 pounds per gallon (ppg). The bottom-hole pressure was determined from the pressure measured in Navajo's WDW-2, or 2813 psia, at 7570 feet. Navajo's WDW-2 is completed in the same interval proposed for WDW-3 and is located in 12-T18S-R27E, 3200 feet southwest of proposed WDW-3. The average specific gravity of the fluid in the Cisco and Canyon Formations is expected to be 1.025, which is the specific gravity of the fluid swabbed from WDW-2 in June 1999 from the interval between 7826 feet and 8399 feet. The expected bottom-hole pressure at 9000 feet in proposed WDW-3 is calculated below:

$$\begin{aligned} \text{BHP (9000 feet)} &= 2813 \text{ psia} + (9000 \text{ feet} - 7570 \text{ feet}) \times 0.433 \text{ psi/ft} \times 1.025 \\ &= 3448 \text{ psia} \end{aligned}$$

Reentry Procedure

1. Level location to accommodate a workover rig, pump, tanks, and ancillary equipment. Build a small working pit approximately 30 feet square and 3 feet deep with a plastic lining. Move in the rig, tank, shale shaker, and work string.

2. Install a 7-1/16-inch, 3000-psi double hydraulic blowout preventer (BOP) and a 7-1/16-inch, 3000-psi annular BOP (see Exhibit A for schematic). Pressure test the BOP stack and casing to 1500 psi for 30 minutes. Pick up a 6-1/8-inch bit, and sufficient 4-3/4-inch drill collars to drill out the cement plugs, on a 2-7/8-inch work string. Mix a tank of 8.5-ppg sodium chloride brine water for circulating fluid.

3. Run the bit to 7000 feet and circulate the wellbore fluid out of the casing into a frac tank for disposal. Drill out the cast iron bridge plug (CIBP), cement at 7010 feet, and clean out to the CIBP at 7208 feet. Circulate the hole clean and pump into the perforations from 7050 feet to 7102 feet to establish a rate and pressure for a pending squeeze cement job.

4. Drill out the CIBP at 7208 feet and clean out past the perforations from 7262 feet to 7278 feet and drill out the third CIBP at 7294 feet. Clean out below the perforations from 7304 feet to 7314 feet. Run a second injection test for injection rate and pressure comparison.

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5. Pull the bit and run a retrievable squeeze packer on the work string. Set the packer at 7150 feet and test for communication between the perforations. Squeeze the perforations from 7262 feet to 7278 feet and 7304 feet to 7314 feet with approximately 100 sacks of neat cement (actual squeeze cement volume to be determined by the injection rate established previously), attempting to reach 1500 psi to 2000 psi squeeze pressure. Release the packer and reverse out any excess cement, then re-test the perforations to the squeeze pressure.

6. Re-set the packer at 6900 feet and squeeze the perforations from 7050 feet to 7102 feet as before.

7. Lay down the squeeze packer and drill out the cement to the CIBP at 7600 feet. Conduct a pressure test to 500 psi for 12 hours to confirm the squeeze cement will contain the annular fluid pressure required during injection operations.

8. Drill out the CIBP at 7600 feet and circulate to the top of the liner at 9051 feet. Circulate the casing clean with 8.5-ppg brine water. Pull the bit and lay down the drill collars.

9. Run a cement bond log with variable density (CBL/VDL) from the liner top to the surface, followed by a baseline multi-finger caliper log from the liner top to the surface.

10. Perforate the intervals 8540 feet to 8620 feet and 7660 feet to 8450 feet with 2 JSPF, using hollow steel carrier perforating guns.

11. Run the work string and retrievable packer to 7600 feet. Swab, or backflow, the perforated interval to recover a representative sample of the formation water for laboratory analysis. Monitor the recovered fluid for hydrogen sulfide.

12. Conduct a short injectivity test with 8.5-ppg brine water to determine the need for stimulation. If required, stimulate the perforations with acid (type and amount to be determined from injectivity results), followed by 500 barrels of 8.5-ppg brine water.

Accepted for record - NMOCD

13. Pull the work string and lay it down. Run a surface readout pressure gauge, with memory backup, to 7600 feet. Conduct an injection test down the casing at 420 gallons per minute for 12 hours (7200 barrels). Shut the well in and record the pressure falloff for a minimum of 12 hours.

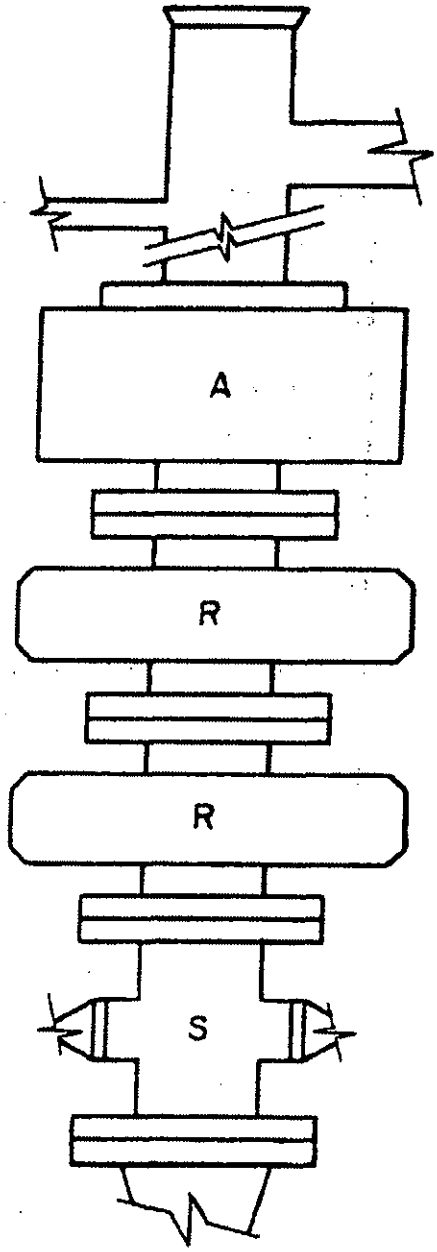
14. Pull the gauges and run a differential temperature survey from surface to 9100 feet. Run a radioactive tracer survey to demonstrate mechanical integrity.

15. Run a tubing conveyed injection packer on 4-1/2-inch, 11.60 lb/ft, K-55, LT&C, 8rd injection tubing. Set the packer at approximately 7600 feet. Fill the annular space with 8.5-ppg brine water containing oxygen scavenger and corrosion inhibitor. Land the injection tubing in the wellhead and install the upper section.

16. Pressure test the annulus as required by New Mexico regulations.

17. Install well annulus monitoring equipment and prepare the well for injection.

Accepted for record - NMOCD



A = ANNULAR BLOWOUT PREVENTER
7-1/16", 3000 psi working pressure

R = RAM TYPE BLOWOUT PREVENTER
7-1/16", 3000 psi working pressure

S = DRILLING SPOOL WITH SIDE OUTLETS
7-1/16", 3000 psi working pressure

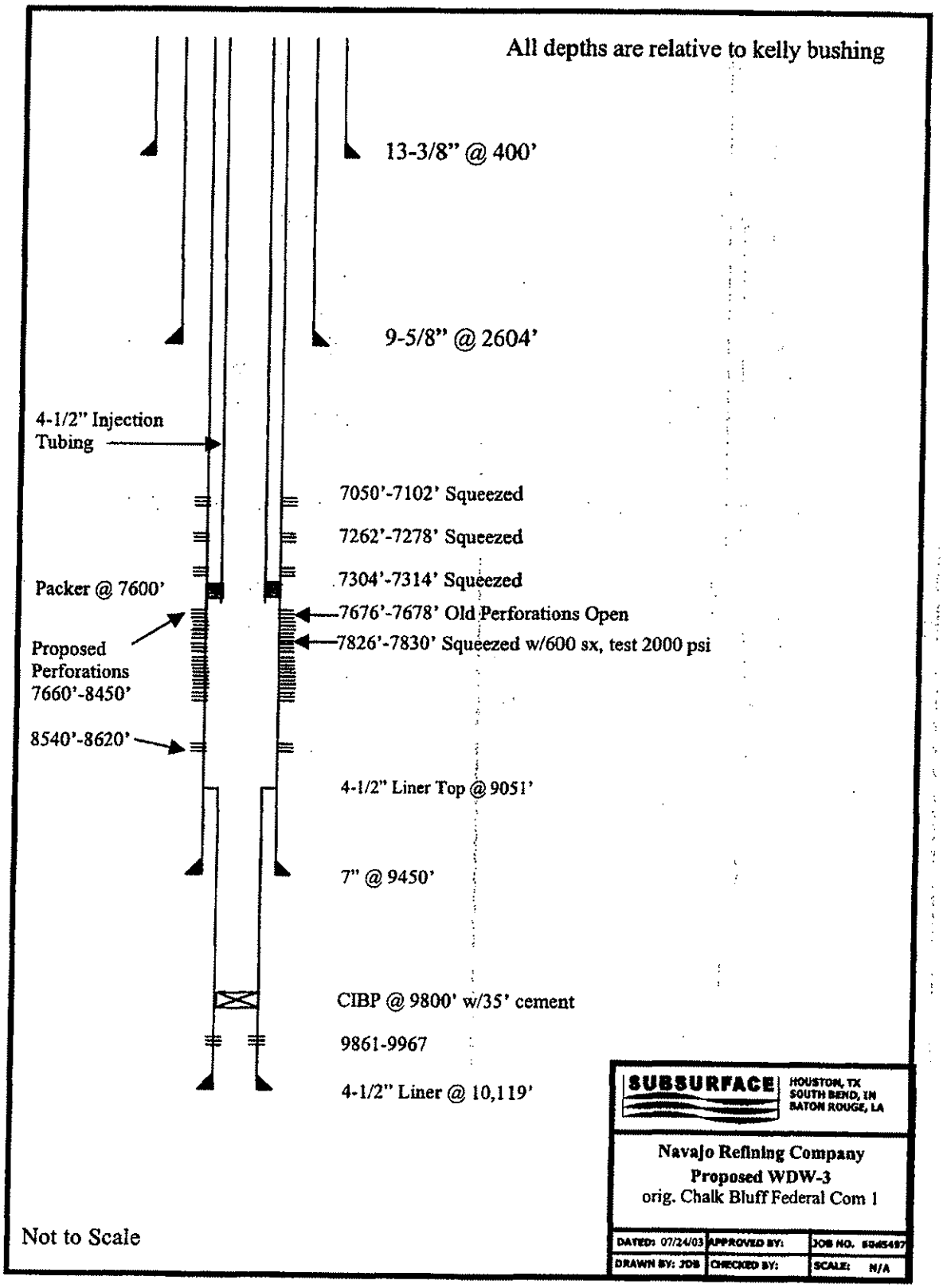
Manual Choke Manifold 2", 3000 psi working pressure

Source: API RP 53, Recommended Practices for Blowout Prevention EquipmentSystems

SUBSURFACE HOUSTON, TX SOUTH BEND, IN BATON ROUGE, LA

Exhibit A
Blowout Preventer Minimum Requirements

DATED: 07/24/03	APPROVED BY:	JOB NO. 69d5497
DRAWN BY: JDB	CHECKED BY:	SCALE: N/A



Accepted for record - NMOCD

SURFACE USE PLAN

NAVAJO REFINING COMPANY
PROPOSED WDW-3
790' FSL, 2250' FWL, 1-T 18S-R27E
EDDY COUNTY, NEW MEXICO

1. Existing Roads: Existing roads that lead to the proposed drillsite are shown on Exhibit A.

2. Access Roads To Be Constructed: No new access road is proposed.

3. Location of Existing Wells: Existing wells within one mile of proposed WDW-3 are shown on Exhibit B.

4. Location of Proposed Facilities If Well Is Completed: The well will be shut in after completion and testing.

5. Location and Type of Water Supply: Water for reentry, testing, and completion operations will be purchased from a commercial water hauler.

6. Source of Construction Materials: No construction materials will be required.

7. Methods of Handling Waste Disposal:

   A. Drill cuttings will be disposed of in the drilling pits.

   B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

   C. Water produced during tests will be disposed of in the drilling pits.

   D. Trash, waste paper, garbage, and junk will be buried in a trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.

   E. All trash and debris will be buried or removed from the wellsite after finishing drilling and/or completion operations.

Accepted for record - NMOCD

8. Ancillary Facilities: None anticipated.

9. Wellsite Layout:

   A. The existing well pad will be leveled to accommodate a workover rig, pump, tanks, and ancillary equipment.

   B. Existing topsoil to a depth of 6 inches will be lifted and stockpiled at the uphill end of the well pad. The stockpiled topsoil will be located uphill to avoid mixing with subsurface materials.

   C. The well pad will be surfaced with material found in place.

   D. A small working pit will be constructed to hold drilling fluids and cuttings. The approximate dimensions of the pit will be 30 feet x 30 feet x 3 feet.

   E. The working pit for drilling fluids and cuttings will be lined with 6-mil plastic.

10. Plans for Restoration of Surface:

   A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk.

   B. Any unguarded pits containing fluids will be fenced until they are filled.

   C. After abandonment, all equipment, trash, and junk will be removed and the location cleaned.

   D. The stockpiled topsoil will be spread over the surface of the location.

11. Surface Ownership: U.S. Department of Interior, Bureau of Land Management.

12. Archaeological Survey: Navajo Refining Company is conducting an archeological survey. The report of the survey will be submitted by Navajo under separate cover.

13. Operator's Representatives: Representatives responsible for assuring compliance with the approved Surface Use Plan:

Accepted for record - NMOCD

Mr. Darrell Moore
Navajo Refining Company
Post Office Box 159
Artesia, New Mexico 88211
505/748-3311

Mr. Jim Bundy
Subsurface Technology, Inc.
7020 Portwest Drive, Suite 100
Houston, Texas 77024
713/880-4640

Exhibits

A. Topographic Map
B. Oil and Gas Map

14. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Navajo Refining Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

9/17/03
Date

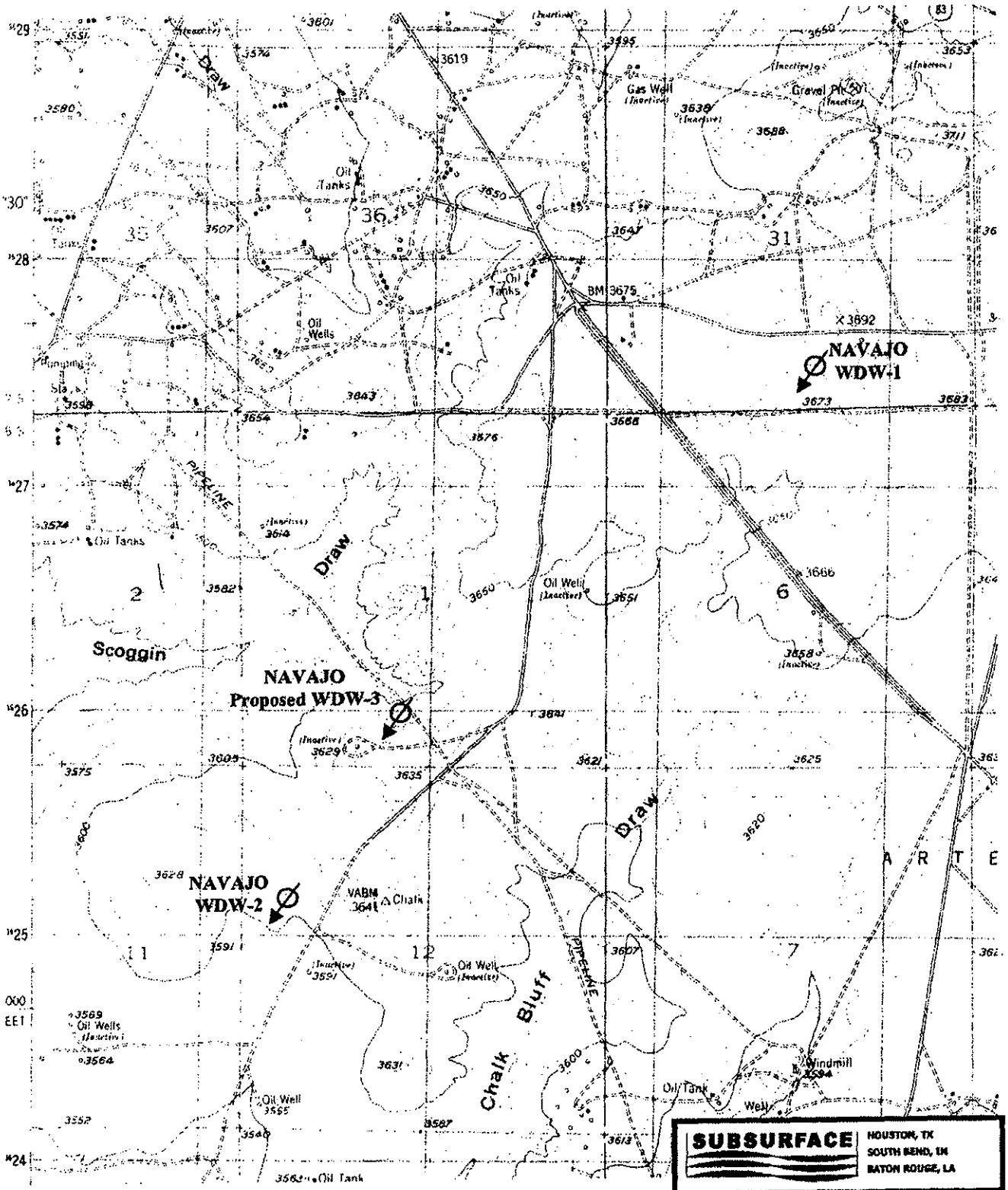
Darrell Moore
Signature

Darrell Moore
Name

Env. Mgr. for Water & Waste
Title

Navajo Refining Company
Company

Accepted for record - NMOCD



USGS Topographic Map
Red Lake Quadrangle, Eddy County, NM

Section corners marked with +

Accepted for record - NMOCD

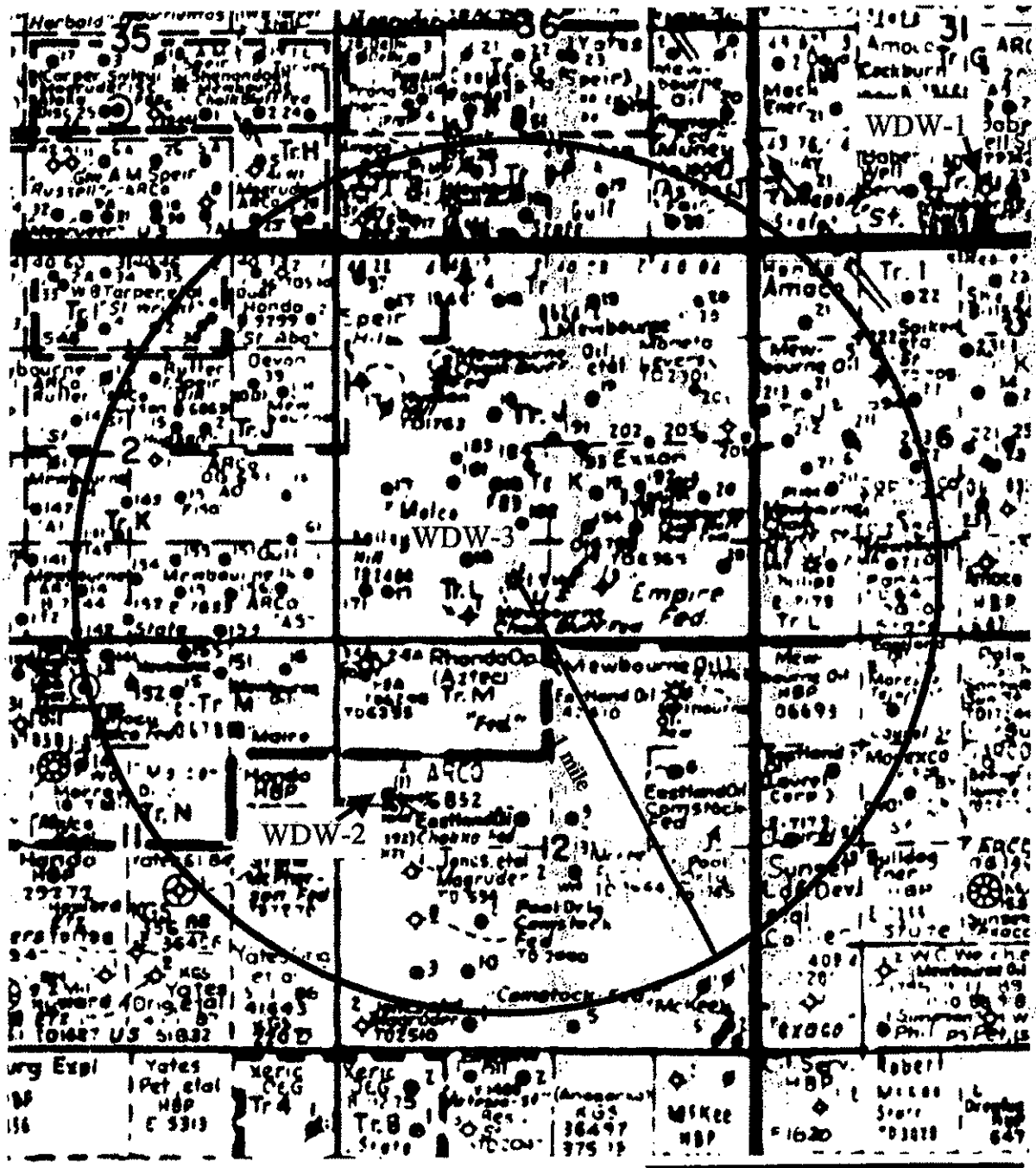
SUBSURFACE HOUSTON, TX SOUTH BEND, IN BATON ROUGE, LA

EXHIBIT A
NAVAJO REFINING COMPANY
PROPOSED WDW-3
790' FSL, 2250' FWL 1-18S-27E

DATE: 7/28/03	APPROVED BY: NLN	JOB NO: 6005497
DRAWN BY:	CHECKED BY:	SCALE: 1"=2000'

T17S - R27E

T17S - R28E



T18S - R27E

EDDY COUNTY, NM

SUBSURFACE	HOUSTON, TX SOUTH BEND, IN BATON ROUGE, LA

EXHIBIT B

WELLS WITHIN 1 MILE OF

NAVAJO REFINING COMPANY

PROPOSED WDW-3

DATED: 7/28/03	APPROVED BY: NLN	JOB NO. 6005497
DRAWN BY:	CHECKED BY:	SCALE: N/A

Accepted for record - NMOCD

Map courtesy of Midland Map Company

OCD-ARTESIA

Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OM B No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160 - 3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

5. Lease Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☐ Gas Well ☑ Other

8. Well Name and No.
WDW-3

2. Name of Operator NAVAJO REFINING COMPANY

9. API Well No.
30-015-26575

3a. Address
P.O. BOX 159, ARTESIA, NM 8821

3b. Phone No. (include area code)
505-746-5281

RECEIVED
JUL 17 2006
OCD-ARTESIA

10. Field and Pool, or Exploratory Area
NAVAJO INJECTION; PERMO-PEN

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
790' FSL, 2250' FWL, 1-18S - 27E

11. County or Parish, State
EDDY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other RECOMPLETE AS CLASS 1 INJECTION WELL
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☑ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

ORIGINAL WELL NAME WAS CHALK BLUFF FEDERAL COM. NO. 1
WELL WILL BE PLUGGED BACK AND COMPLETED AS A CLASS I INJECTION WELL AS FOLLOWS:

DRILL OUT BRIDGE PLUG AT 7010' AND CLEAN OUT TO 7208';
INJECTION-TEST PERFORATIONS AT 7050'-7102', 7262'-7278' TO PLAN SQUEEZE CEMENT JOB;
DRILL OUT BRIDGE PLUGS AT 7208' AND 7294'. CLEAN OUT HOLE THROUGH PERFS AT 7304'-7314';
SQUEEZE-CEMENT PERFORATIONS AT 7050'-7102',7262'-7278', AND 7304'-7314';
DRILL OUT BRIDGE PLUG AT 7600' AND CLEAN OUT TO TOP OF LINER AT 9051';
RUN CBL/VDL AND CALIPER FROM 9051' TO SURFACE;
PERFORATE 8540'-8620' AND 7660'-8450';
RUN INJECTIVITY TEST, AND ACIDIZE IF NECESSARY;
RUN INJECTION/FALLOFF TEST;
RUN DIFFERENTIAL TEMPERATURE SURVEY;
RUN RADIOACTIVE TRACER SURVEY;
INSTALL INJECTION TUBING AND PACKER TO APPROX. 7600'; AND
INSTALL WELL ANNULUS MONITORING EQUIPMENT, AND PREPARE FOR WELL INJECTION.

ACCEPTED FOR RECORD
JUL 12 2006
LES BABYAK
PETROLEUM ENGINEER

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)
DARRELL MOORE

Title ENVIRONMENTAL MANAGER FOR WATER & WASTE

Signature Darrell Moore

Date 6/29/06

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Accepted for record
NMOCD

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575]
(Carl Chavez & Leonard Lowe- OCD)
November 15, 2006

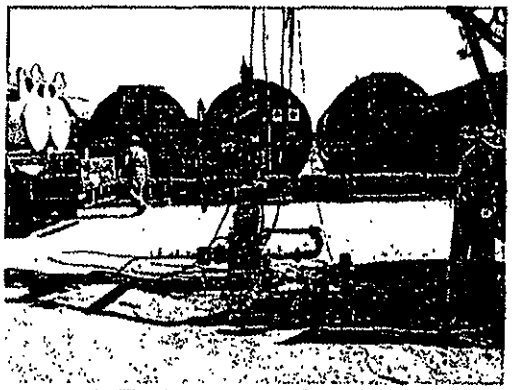


Image 1: Facing west. Christmas Tree with 500-barrel tanks in background. Far left tank was the only tank providing salt water. Truck on left is the pump truck pumping brine water only. Right truck is the rig truck (Wood Group Logging Service).

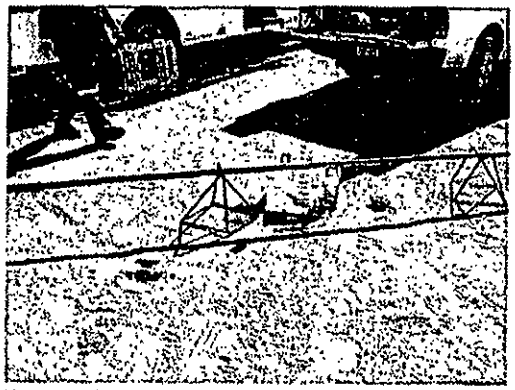


Image 2: Radioactive tool set up. Tracer, Iodine 131 (half-life ~ 8 days).

Image 3: Rig truck with view of data logger compartment (Wood Group Logging Services).

Image 4: Petroplex workers prepping wellhead for wire line tool entry.

Image 5: Petroplex employees laying pipe from pump truck to well head.

Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575]
(Carl Chavez & Leonard Lowe- OCD)
November 15, 2006

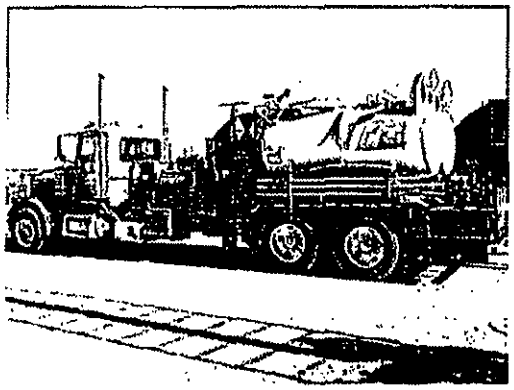


Image 6: Pump truck, Petroplex, for Brine water pumping only. No HCL used throughout process.

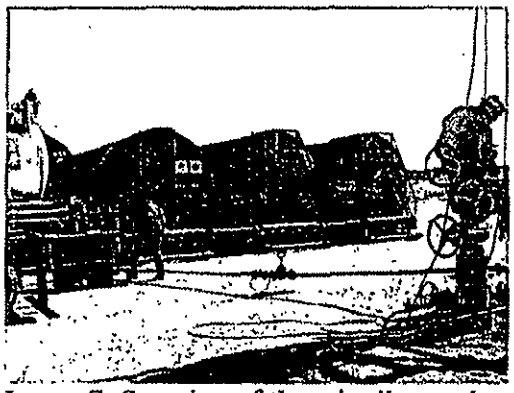


Image 7: Securing of the wire line to the wellhead.

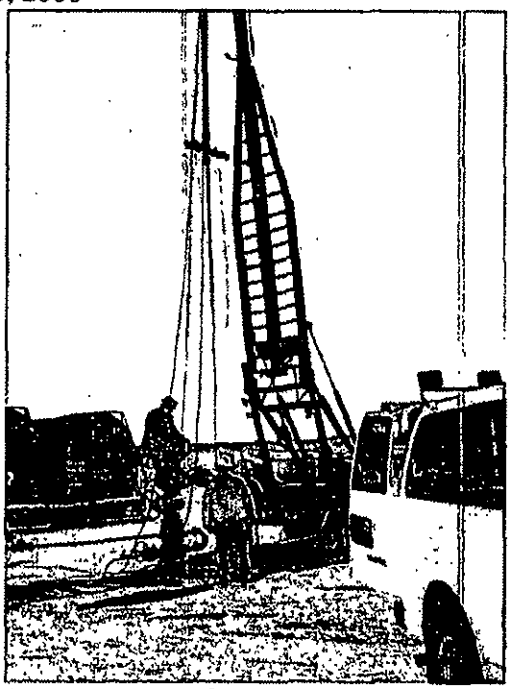


Image 8: Wood Group employee securing wellhead for tool entry.

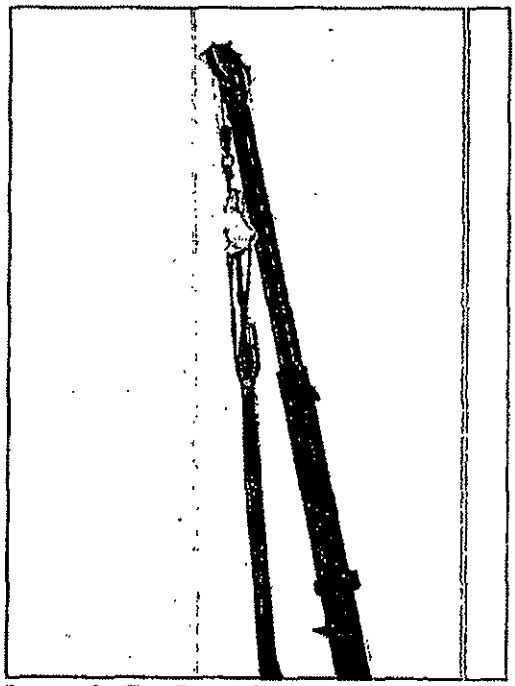
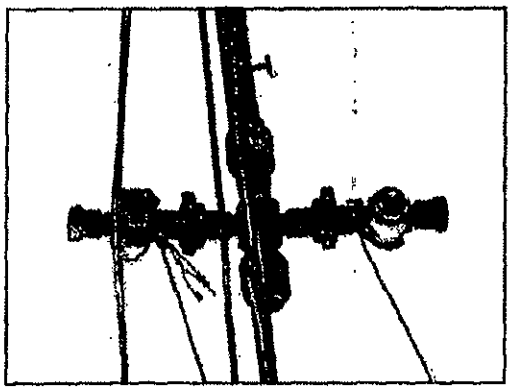


Image 9: Configuration at the top end of the boom.

Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575]
(Carl Chavez & Leonard Lowe- OCD)
November 15, 2006



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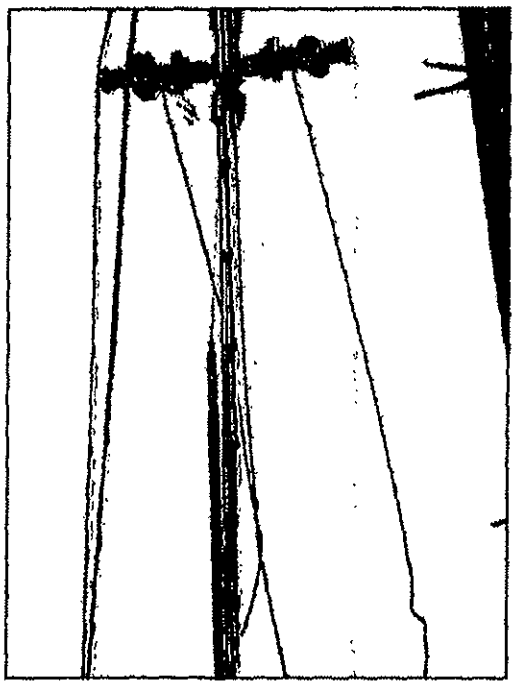
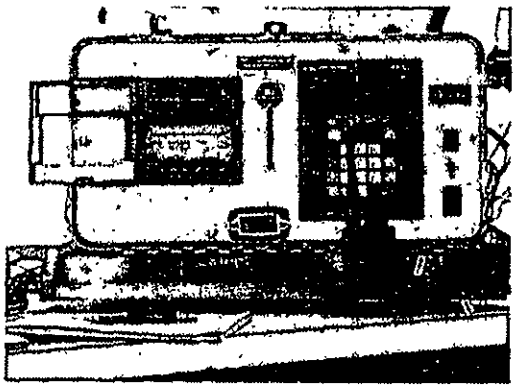


Image 11:



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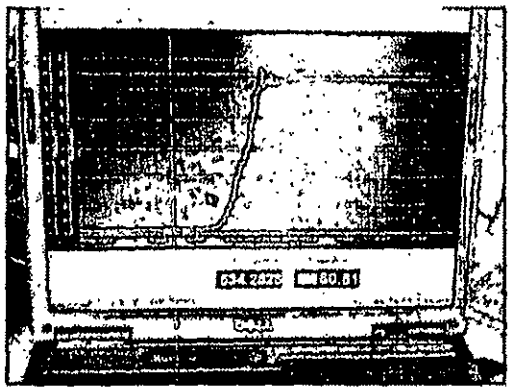

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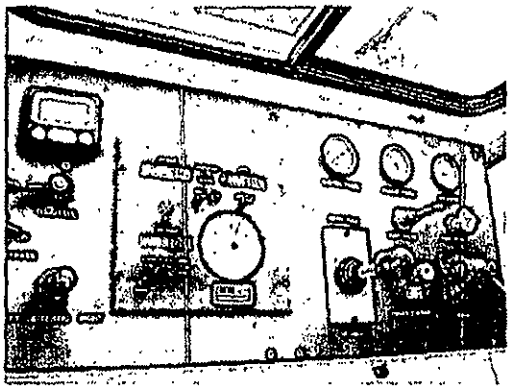

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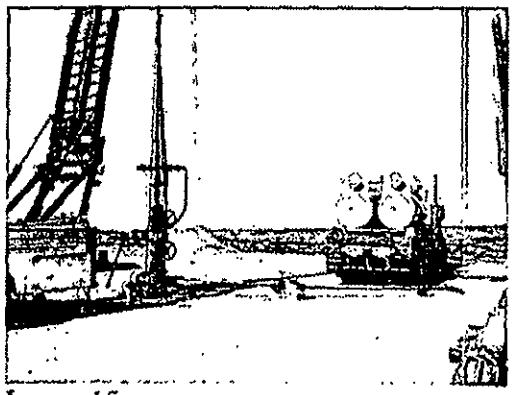


Image 15:

Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575]
(Carl Chavez & Leonard Lowe- OCD)
November 15, 2006

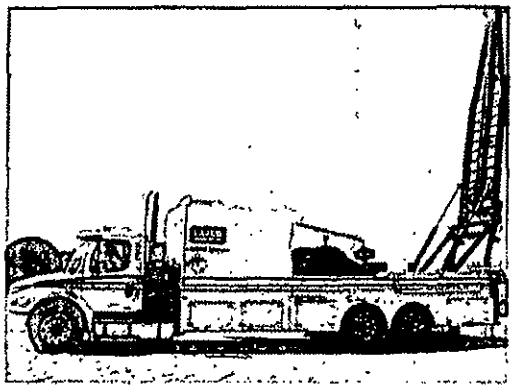
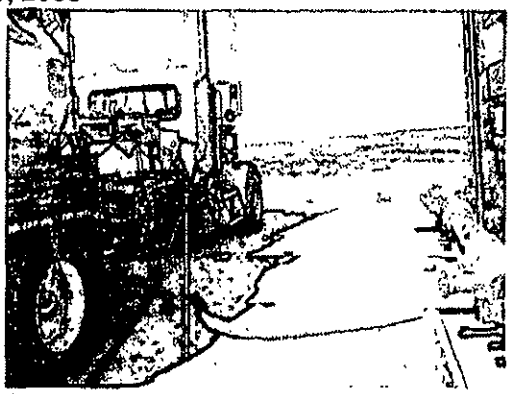


Image 16:



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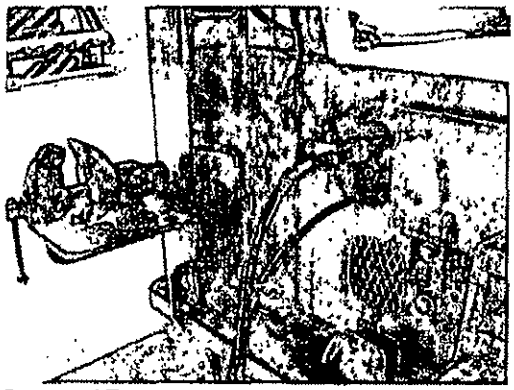


Image 17:

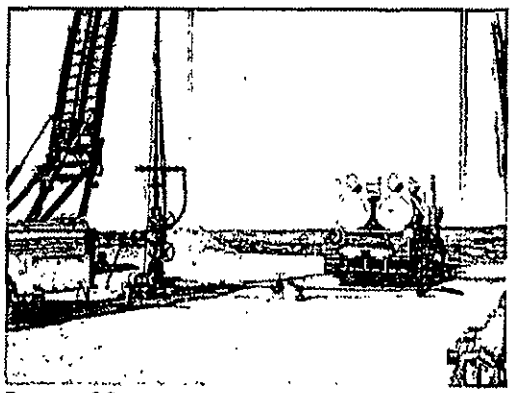


Image 20:

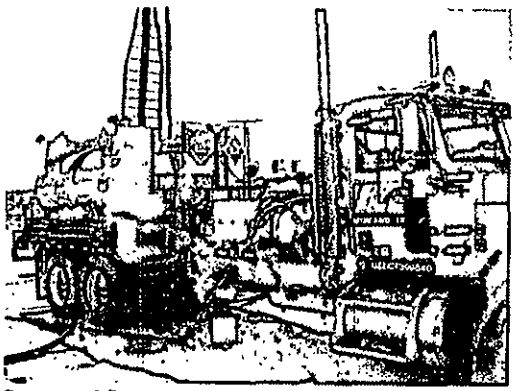


Image 18:

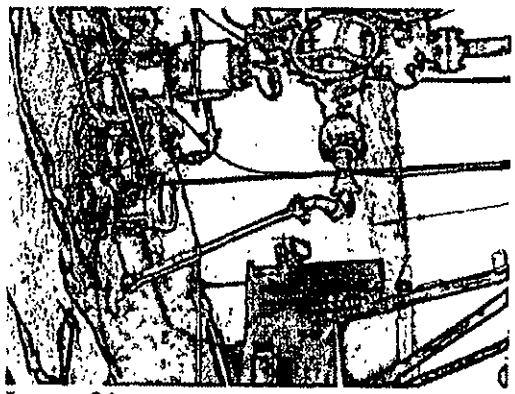
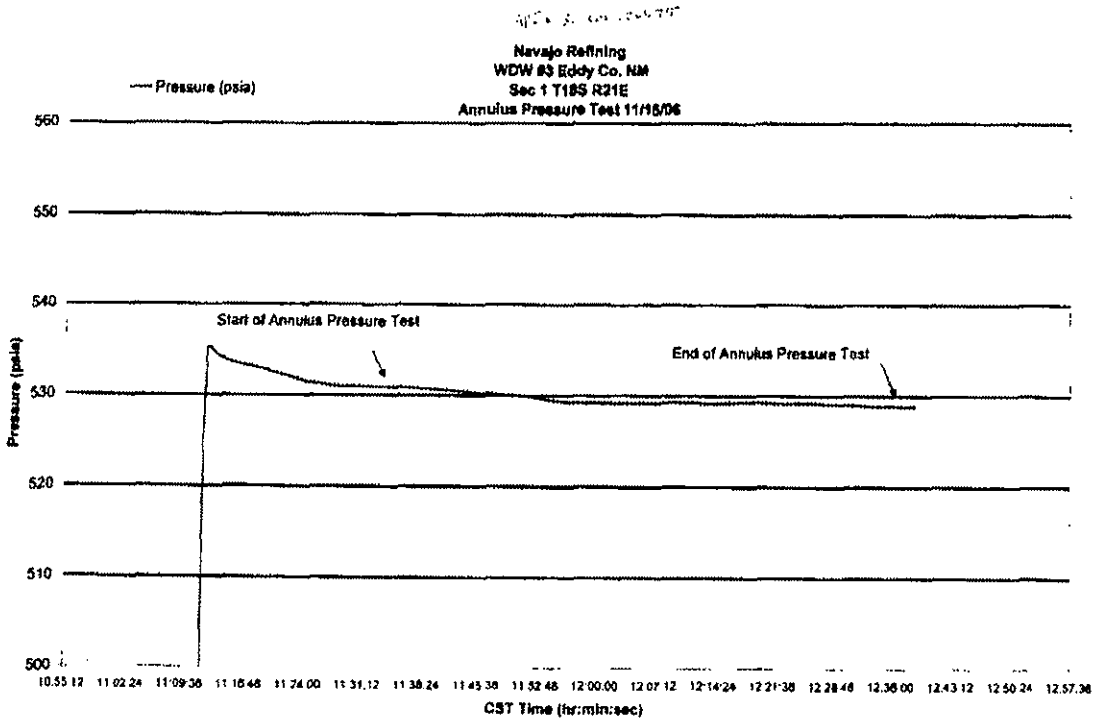
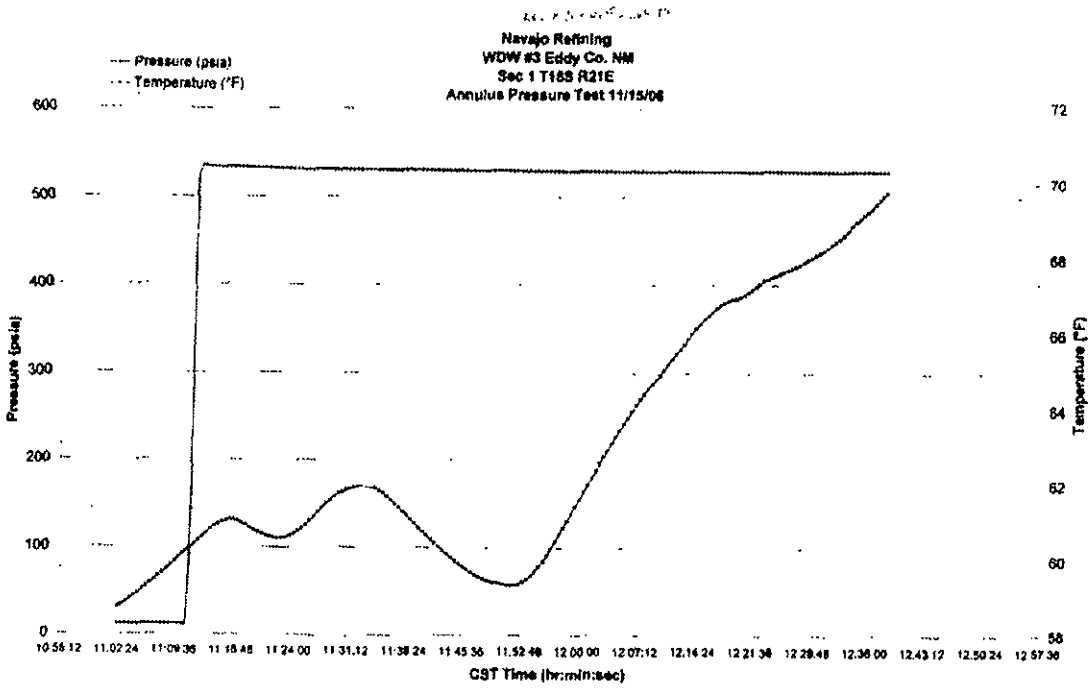


Image 21:

Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575]
(Carl Chavez & Leonard Lowe- OCD)
November 15, 2006





District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address	OGRID Number
NAVAJO RENING COMPANY	API Number 30 – 015-26575

Property Code	Property Name	Well No.
	WDW	3

Proposed Pool 1	Proposed Pool 2
NAVAJO INJECTION; PERMO-PENN	

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	1	18S	27E		2250 FWL		750 FSL		EDDY

[8] Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
E	I	R		3609
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
NO	9051'	CANYON		

Depth to Groundwater	Distance from nearest fresh water well	Distance from nearest surface water
UNKNOWN	1.25 MI TO 18.28.7.330	10 MILES

Pit: Liner: Synthetic ☐ ____ mils thick Clay ☐ Pit Volume: ____ bbls

Closed-Loop System ☐

Drilling Method:
Fresh Water ☐ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13 3/8"	54.50#	400'	425 - CIRC	
12-1/4"	9 5/8"	36#	2604'	1025 - CIRC	
8-3/4"	7"	26# and 29#	9450'	1350 - CIRC	

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

ORIGINAL WELL NAME WAS CHALK BLUFF FEDERAL COM. NO. 1
WELL WILL BE PLUGGED BACK AND COMPLETED AS A CLASS I INJECTION WELL AS FOLLOWS:
DRILL OUT BRIDGE PLUG AT 7010' AND CLEAN OUT TO 7208';
INJECTION-TEST PERFORATIONS AT 7050'-7102', 7262'-7278' TO PLAN SQUEEZE CEMENT JOB;
DRILL OUT BRIDGE PLUGS AT 7208' AND 7294'. CLEAN OUT HOLE THROUGH PERFS AT 7304'-7314';
SQUEEZE-CEMENT PERFORATIONS AT 7050'-7102',7262'-7278', AND 7304'-7314';
DRILL OUT BRIDGE PLUG AT 7600' AND CLEAN OUT TO TOP OF LINER AT 9051';
RUN CBL/VDL AND CALIPER FROM 9051' TO SURFACE;
PERFORATE 8540'-8620' AND 7660'-8450';
RUN INJECTIVITY TEST, AND ACIDIZE IF NECESSARY;
RUN INJECTION/FALLOFF TEST;
RUN DIFFERENTIAL TEMPERATURE SURVEY;
RUN RADIOACTIVE TRACER SURVEY;
INSTALL INJECTION TUBING AND PACKER TO APPROX. 7600', AND
INSTALL WELL ANNULUS MONITORING EQUIPMENT, AND PREPARE FOR WELL INJECTION.

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Printed name: Darrell Moore
Title: Env. Mgr. for Water & Waste
E-mail Address: darrell.moore@navajo-refining.com
Date: 6/29/06 Phone: 505-746-5281

OIL CONSERVATION DIVISION
Approved by: Wayne Price
Title:
Approval Date: 8/11/06 Expiration Date: 8/11/07
Conditions of Approval Attached ☑ DISTRICT OFFICE MUST APPROVE CASING PROGRAM.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30 - 015 -26575		Navajo Injection; Permo-Penn

[4] Property Code	[5] Property Name	[6] Well Number
	WDW	3

[7] OGRID No.	[8] Operator Name	[9] Elevation
	Navajo Refining Company	3609' GL; 3625' KB

[10] Surface Location

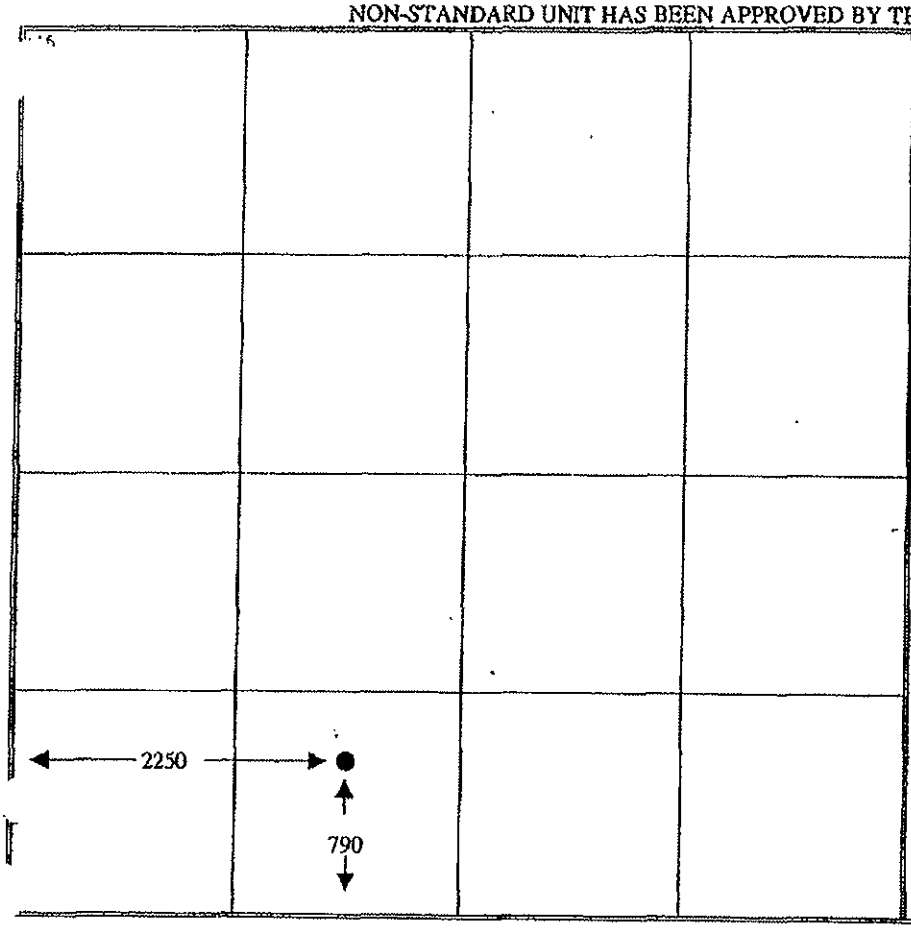
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	1	18S	27E		790	South	2250	West	Eddy

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: Darrell Moore

Printed Name: Darrell Moore

Title and E-mail Address: Env. Mgr. for Water & Waste darrell@navajo-refining.com

Date: 9/17/03

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

REENTRY PROCEDURE

NAVAJO REFINING COMPANY'S WDW-3 (PROPOSED)

790'FSL and 2250' FWL, Section 1, T18S, R27E
Eddy County, New Mexico
Chalk Bluff Federal Com. No. 1, API No. 30-015-26575

All depths are in feet below well's original kelly bushing height (RKB) of 16 feet above ground level. The original KB elevation is 3625 feet above mean sea level. The ground level elevation is 3609 feet above mean sea level.

Tops of Geologic Formations (from RKB)

The base of the lowermost USDW is at 420 feet.

San Andres	1976 feet	Lower Wolfcamp	7303 feet
Yeso	4030 feet	Cisco	7650 feet
Abo	5380 feet	Canyon	8390 feet
Wolfcamp	6745 feet	Strawn	8894 feet

Depth of Plugs

7010 feet in 7-inch casing above perforations 7050 feet to 7102 feet
7208 feet in 7-inch casing above perforations 7262 feet to 7278 feet
7294 feet in 7-inch casing above perforations 7304 feet to 7314 feet
7600 feet in 7-inch casing above perforations 7676 feet to 7678 and 7826 feet to 7830 feet
9800 feet in 4-1/2-inch liner above perforations 9861 feet to 9967 feet

Anticipated Formation Pressure

The expected bottom-hole pressure is 3448 pounds per square inch absolute (psia) at 9000 feet, for a gradient of 0.383 pounds per square inch (psi) per foot, or an equivalent

mud weight of 7.36 pounds per gallon (ppg). The bottom-hole pressure was determined from the pressure measured in Navajo's WDW-2, or 2813 psia, at 7570 feet. Navajo's WDW-2 is completed in the same interval proposed for WDW-3 and is located in 12-T18S-R27E, 3200 feet southwest of proposed WDW-3. The average specific gravity of the fluid in the Cisco and Canyon Formations is expected to be 1.025, which is the specific gravity of the fluid swabbed from WDW-2 in June 1999 from the interval between 7826 feet and 8399 feet. The expected bottom-hole pressure at 9000 feet in proposed WDW-3 is calculated below:

$$\begin{aligned} \text{BHP (9000 feet)} &= 2813 \text{ psia} + (9000 \text{ feet} - 7570 \text{ feet}) \times 0.433 \text{ psi/ft} \times 1.025 \\ &= 3448 \text{ psia} \end{aligned}$$

Reentry Procedure

1. Level location to accommodate a workover rig, pump, tanks, and ancillary equipment. Build a small working pit approximately 30 feet square and 3 feet deep with a plastic lining. Move in the rig, tank, shale shaker, and work string.

2. Install a 7-1/16-inch, 3000-psi double hydraulic blowout preventer (BOP) and a 7-1/16-inch, 3000-psi annular BOP (see Exhibit A for schematic). Pressure test the BOP stack and casing to 1500 psi for 30 minutes. Pick up a 6-1/8-inch bit, and sufficient 4-3/4-inch drill collars to drill out the cement plugs, on a 2-7/8-inch work string. Mix a tank of 8.5-ppg sodium chloride brine water for circulating fluid.

3. Run the bit to 7000 feet and circulate the wellbore fluid out of the casing into a frac tank for disposal. Drill out the cast iron bridge plug (CIBP), cement at 7010 feet, and clean out to the CIBP at 7208 feet. Circulate the hole clean and pump into the perforations from 7050 feet to 7102 feet to establish a rate and pressure for a pending squeeze cement job.

4. Drill out the CIBP at 7208 feet and clean out past the perforations from 7262 feet to 7278 feet and drill out the third CIBP at 7294 feet. Clean out below the perforations from 7304 feet to 7314 feet. Run a second injection test for injection rate and pressure comparison.

5. Pull the bit and run a retrievable squeeze packer on the work string. Set the packer at 7150 feet and test for communication between the perforations. Squeeze the perforations from 7262 feet to 7278 feet and 7304 feet to 7314 feet with approximately 100 sacks of neat cement (actual squeeze cement volume to be determined by the injection rate established previously), attempting to reach 1500 psi to 2000 psi squeeze pressure. Release the packer and reverse out any excess cement, then re-test the perforations to the squeeze pressure.

6. Re-set the packer at 6900 feet and squeeze the perforations from 7050 feet to 7102 feet as before.

7. Lay down the squeeze packer and drill out the cement to the CIBP at 7600 feet. Conduct a pressure test to 500 psi for 12 hours to confirm the squeeze cement will contain the annular fluid pressure required during injection operations.

8. Drill out the CIBP at 7600 feet and circulate to the top of the liner at 9051 feet. Circulate the casing clean with 8.5-ppg brine water. Pull the bit and lay down the drill collars.

9. Run a cement bond log with variable density (CBL/VDL) from the liner top to the surface, followed by a baseline multi-finger caliper log from the liner top to the surface.

10. Perforate the intervals 8540 feet to 8620 feet and 7660 feet to 8450 feet with 2 JSPF, using hollow steel carrier perforating guns.

11. Run the work string and retrievable packer to 7600 feet. Swab, or backflow, the perforated interval to recover a representative sample of the formation water for laboratory analysis. Monitor the recovered fluid for hydrogen sulfide.

12. Conduct a short injectivity test with 8.5-ppg brine water to determine the need for stimulation. If required, stimulate the perforations with acid (type and amount to be determined from injectivity results), followed by 500 barrels of 8.5-ppg brine water.

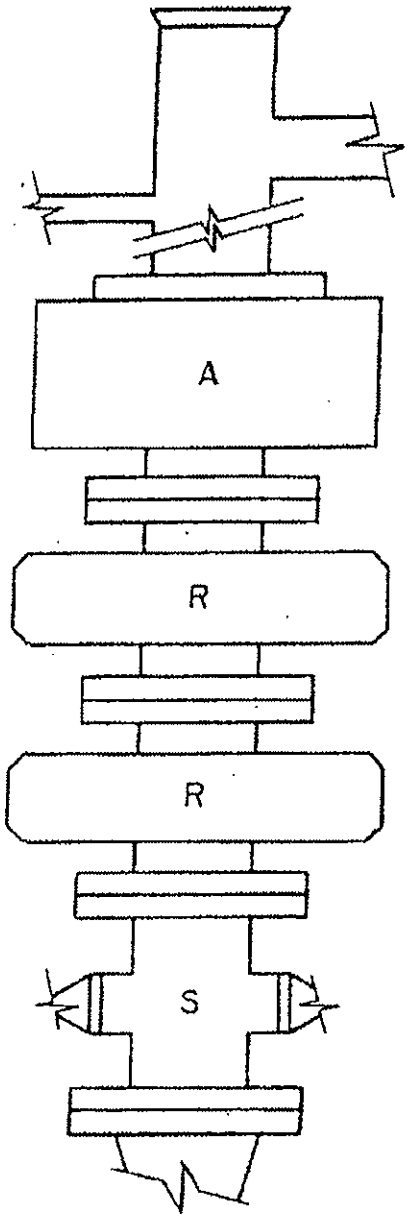
13. Pull the work string and lay it down. Run a surface readout pressure gauge, with memory backup, to 7600 feet. Conduct an injection test down the casing at 420 gallons per minute for 12 hours (7200 barrels). Shut the well in and record the pressure falloff for a minimum of 12 hours.

14. Pull the gauges and run a differential temperature survey from surface to 9100 feet. Run a radioactive tracer survey to demonstrate mechanical integrity.

15. Run a tubing conveyed injection packer on 4-1/2-inch, 11.60 lb/ft, K-55, LT&C, 8rd injection tubing. Set the packer at approximately 7600 feet. Fill the annular space with 8.5-ppg brine water containing oxygen scavenger and corrosion inhibitor. Land the injection tubing in the wellhead and install the upper section.

16. Pressure test the annulus as required by New Mexico regulations.

17. Install well annulus monitoring equipment and prepare the well for injection.



A = ANNULAR BLOWOUT PREVENTER
7-1/16", 3000 psi working pressure

R = RAM TYPE BLOWOUT PREVENTER
7-1/16", 3000 psi working pressure

S = DRILLING SPOOL WITH SIDE OUTLETS
7-1/16", 3000 psi working pressure

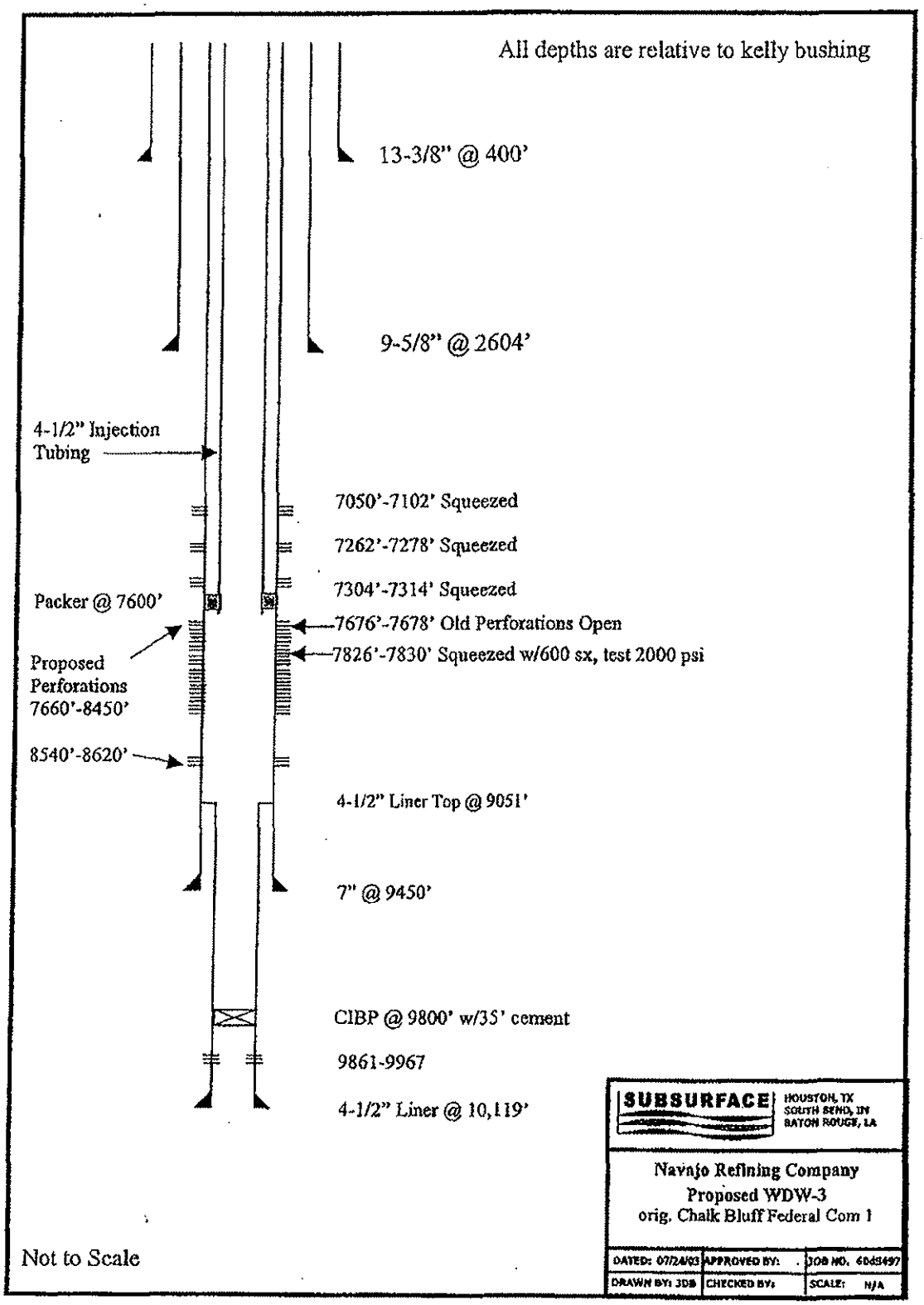
Manual Choke Manifold 2", 3000 psi working pressure

Source: API RP 53, Recommended Practices for Blowout Prevention EquipmentSystems

SUBSURFACE HOUSTON, TX SOUTH BEND, IN BATON ROUGE, LA

Exhibit A
Blowout Preventer Minimum
Requirements

DATED: 07/24/03	APPROVED BY:	JOB NO. 6405497
DRAWN BY: JDB	CHECKED BY:	SCALE: N/A


All depths are relative to kelly bushing
13-3/8" @ 400'
9-5/8" @ 2604'
4-1/2" Injection Tubing
7050'-7102' Squeezed
7262'-7278' Squeezed
7304'-7314' Squeezed
Packer @ 7600'
7676'-7678' Old Perforations Open
7826'-7830' Squeezed w/600 sx, test 2000 psi
Proposed Perforations 7660'-8450'
8540'-8620'
4-1/2" Liner Top @ 9051'
7" @ 9450'
CIBP @ 9800' w/35' cement
9861-9967
4-1/2" Liner @ 10,119'
Not to Scale
SUBSURFACE
HOUSTON, TX
SOUTH BEND, IN
BATON ROUGE, LA
Navajo Refining Company
Proposed WDW-3
orig. Chalk Bluff Federal Com 1
DATED: 07/24/03
APPROVED BY:
JOB NO. 6045497
DRAWN BY: JDB
CHECKED BY:
SCALE: N/A

SURFACE USE PLAN

NAVAJO REFINING COMPANY
PROPOSED WDW-3
790' FSL, 2250' FWL, 1-T 18S-R27E
EDDY COUNTY, NEW MEXICO

1. Existing Roads: Existing roads that lead to the proposed drillsite are shown on Exhibit A.

2. Access Roads To Be Constructed: No new access road is proposed.

3. Location of Existing Wells: Existing wells within one mile of proposed WDW-3 are shown on Exhibit B.

4. Location of Proposed Facilities If Well Is Completed: The well will be shut in after completion and testing.

5. Location and Type of Water Supply: Water for reentry, testing, and completion operations will be purchased from a commercial water hauler.

6. Source of Construction Materials: No construction materials will be required.

7. Methods of Handling Waste Disposal:

   A. Drill cuttings will be disposed of in the drilling pits.

   B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

   C. Water produced during tests will be disposed of in the drilling pits.

   D. Trash, waste paper, garbage, and junk will be buried in a trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.

   E. All trash and debris will be buried or removed from the wellsite after finishing drilling and/or completion operations.

8. Ancillary Facilities: None anticipated.

9. Wellsite Layout:

   A. The existing well pad will be leveled to accommodate a workover rig, pump, tanks, and ancillary equipment.

   B. Existing topsoil to a depth of 6 inches will be lifted and stockpiled at the uphill end of the well pad. The stockpiled topsoil will be located uphill to avoid mixing with subsurface materials.

   C. The well pad will be surfaced with material found in place.

   D. A small working pit will be constructed to hold drilling fluids and cuttings. The approximate dimensions of the pit will be 30 feet x 30 feet x 3 feet.

   E. The working pit for drilling fluids and cuttings will be lined with 6-mil plastic.

10. Plans for Restoration of Surface:

   A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk.

   B. Any unguarded pits containing fluids will be fenced until they are filled.

   C. After abandonment, all equipment, trash, and junk will be removed and the location cleaned.

   D. The stockpiled topsoil will be spread over the surface of the location.

11. Surface Ownership: U.S. Department of Interior, Bureau of Land Management.

12. Archaeological Survey: Navajo Refining Company is conducting an archeological survey. The report of the survey will be submitted by Navajo under separate cover.

13. Operator's Representatives: Representatives responsible for assuring compliance with the approved Surface Use Plan:

Mr. Darrell Moore
Navajo Refining Company
Post Office Box 159
Artesia, New Mexico 88211
505/748-3311

Mr. Jim Bundy
Subsurface Technology, Inc.
7020 Portwest Drive, Suite 100
Houston, Texas 77024
713/880-4640

Exhibits

A. Topographic Map
B. Oil and Gas Map

14. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Navajo Refining Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

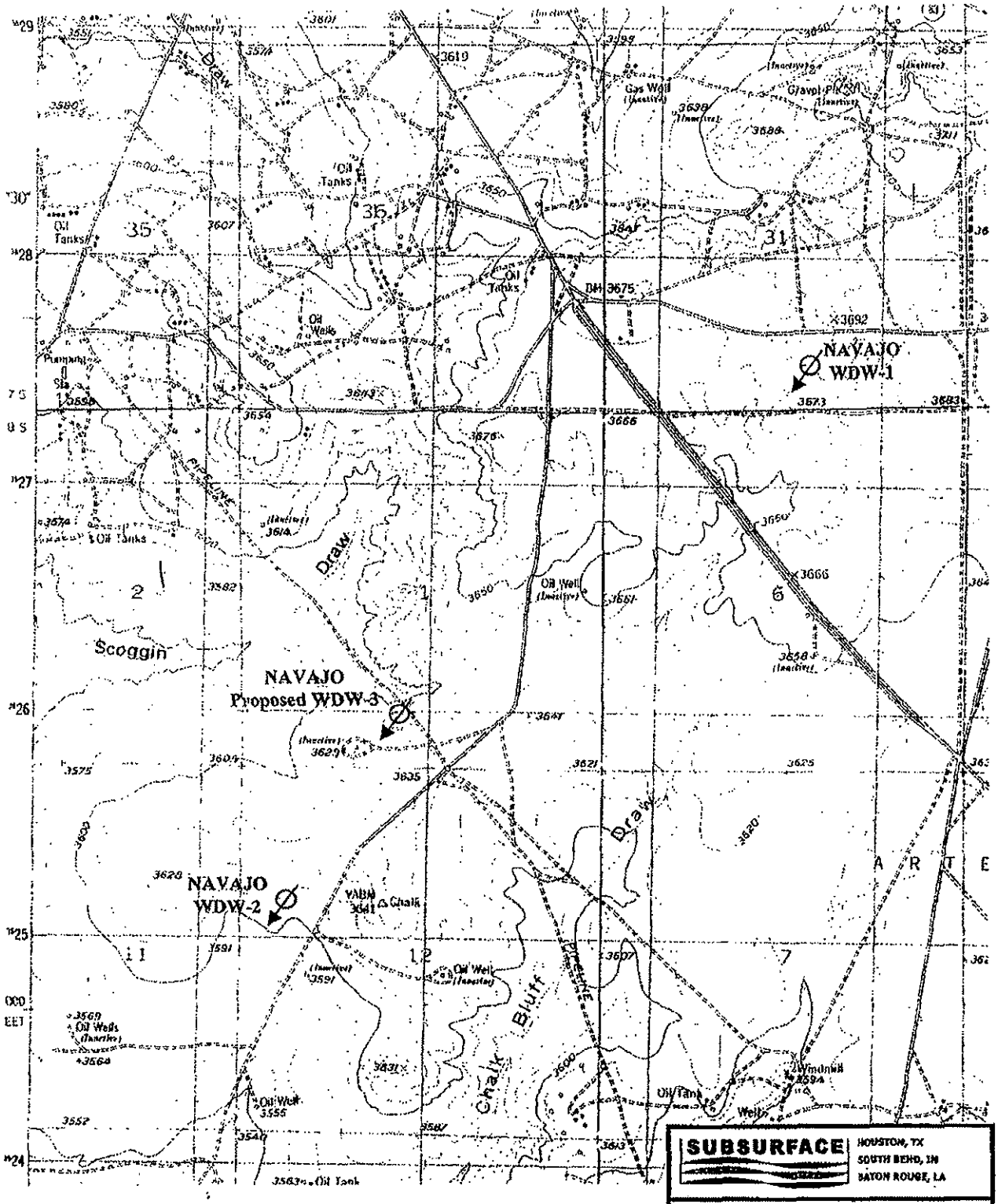
9/17/03
Date

Darrell Moore
Signature

Darrell Moore
Name

Env. Mgr. for Water & Waste
Title

Navajo Refining Company
Company



USGS Topographic Map
Red Lake Quadrangle, Eddy County, NM

Section corners marked with +

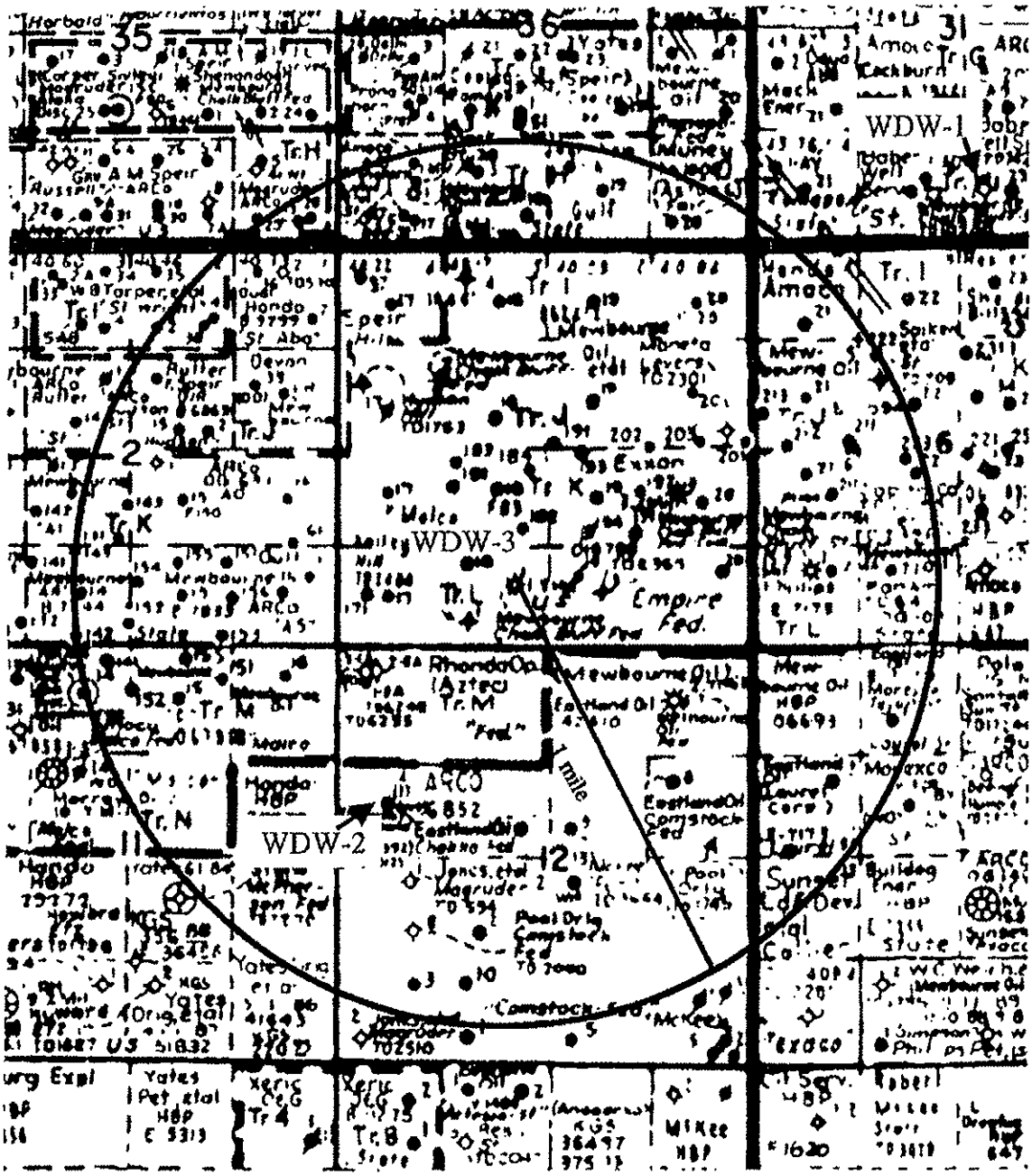
SUBSURFACE
HOUSTON, TX
SOUTH BEND, IN
BATON ROUGE, LA

EXHIBIT A
NAVAJO REFINING COMPANY
PROPOSED WDW-3
790' FSL, 2250' FWL 1-18S-27E

DATE: 7/28/03	APPROVED BY: HLN	JOB NO: 6005497
DRAWN BY:	CHECKED BY:	SCALE: 1"=2000'

T17S - R27E

T17S - R28E



T18S - R27E

EDDY COUNTY, NM

SUBSURFACE	HOUSTON, TX SOUTH BEND, IN BATON ROUGE, LA

EXHIBIT B

WELLS WITHIN 1 MILE OF
NAVAJO REFINING COMPANY
PROPOSED WDW-3

DATED: 7/28/03	APPROVED BY: HLN	JOB NO. 6905407
DRAWN BY:	CHECKED BY:	SCALE: N/A

Map courtesy of Midland Map Company

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

WELL API NO. 30 – 015 - 26575	
5. Indicate Type of Lease STATE X FEE ☐	
6. State Oil & Gas Lease No. NM-0557371	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	7. Lease Name or Unit Agreement Name WDW - 3
1. Type of Well: Oil Well ☐ Gas Well X Other	8. Well Number 3
2. Name of Operator NAVAJO REFINING COMPANY	9. OGRID Number
3. Address of Operator P.O. BOX 159, ARTESIA, NM 88211	10. Pool name or Wildcat

RECEIVED OCD - ARTESIA

4. Well Location
Unit Letter_____: 790 feet from the SOUTH line and 2250 feet from the WEST line
Section 1 Township 18 south Range 27 East NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
GR 3609', RKB 3625'

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type N/A **Depth to Groundwater** 100 FT **Distance from nearest fresh water well** 1 MILE **Distance from nearest surface water** 6 MILES

Pit Liner Thickness: N/A **mil** **Below-Grade Tank: Volume** N/A **bbls; Construction Material** N/A

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
OTHER: To complete a Class 1 non-hazardous waste well		OTHER: Well completion report to follow	X

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

See attached well summary document and well schematic.

MIT Witnessed by Carl Chavez
No Chart Submitted
/g.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.**

SIGNATURE Darrell Moore TITLE Env. Mgr. for Water & Waste DATE 1/18/07

Type or print name E-mail address: Telephone No.

For State Use Only

Accepted for record
NMOCD
/g.

APPROVED BY:_____ TITLE_____ DATE_____

Conditions of Approval (if any):

Submit To Appropriate District Office
State Lease - 6 copies
Fee Lease - 5 copies
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-105
Revised June 10, 2003

WELL API NO.
30 – 015 - 26575

5. Indicate Type of Lease
STATE X FEE ☐

State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:
OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER Non-hazardous Waste Disposal Well

b. Type of Completion:
NEW WELL ☐ WORK OVER X DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR ☐ OTHER

7. Lease Name or Unit Agreement Name
Waste Disposal Well / WDW - 3

2. Name of Operator
NAVAJO REFINING COMPANY

8. Well No. 3

3. Address of Operator
P.O. BOX 159, ARTESIA, NM 88211

9. Pool name or Wildcat

RECEIVED OCD - ARTESIA

4. Well Location
Unit Letter _____ : 790 Feet From The SOUTH Line and 2250 Feet From The WEST Line

Section 1 Township 18 South Range 27 East NMPM County Eddy, NM

10. Date Spudded	11. Date T.D. Reached	12. Date Compl. (Ready to Prod.)	13. Elevations (DF& RKB, RT, GR, etc.)	14. Elev. Casinghead
12/22/90	1/29/91	Injection 1/15/07	DF 3616 ft / GR 3609 ft	3609 ft

15. Total Depth	16. Plug Back T.D.	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By	Rotary Tools	Cable Tools
10,119 ft	9020 ft	2		(Reentry Drill out CIBP Plugs with Swivel)	

19. Producing Interval(s), of this completion - Top, Bottom, Name
Injection Interval 7660 ft to 8450 ft Cisco & 8540 ft to 8620 ft Canyon

20. Was Directional Survey Made
No

21. Type Electric and Other Logs Run
CBL/VDL, Temperature, Caliper, Radioactive Tracer, Pressure

22. Was Well Cored
No

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	54.50	400'	17 ½"	425-CIRC	NONE
9 5/8"	36	2604'	12 ¼"	1025-CIRC	NONE
7"	29 & 26	9450'	8 ¾"	1350-CIRC	NONE

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
4 ½"	9051'	10,119'	175	NONE

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
4 ½"	7567'	7575'

26. Perforation record (interval, size, and number)

7660' TO 8450' / 0.5" / 2 JSPF / 60°
8540' TO 8620' / 0.5" / 2 JSPF / 60°

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
7050' TO 7102'	80 SKS PREM 14.8 PPG CMT SQZ PERF
7262' TO 7278'	100 SKS PREM 14.8 PPG CMT SQZ PERF
7304' TO 7314'	80 SKS PREM 14.8 PPG CMT SQZ PERF

28 PRODUCTION

Date First Production	Production Method *(Flowing, gas lift, pumping - Size and type pump)*	Well Status *(Prod. or Shut-in)*
(INJECTION WELL)	(INJECTION PUMP)	(SHUT-IN)

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
10/19/06	4 HOURS	NO CHOKE INJECT TEST	N/A	N/A	N/A	N/A	N/A

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - *(Corr.)*
MAX INJECT 1450 PSI	750 PSI	8 BPM	N/A	N/A	N/A	N/A

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*
NO GAS

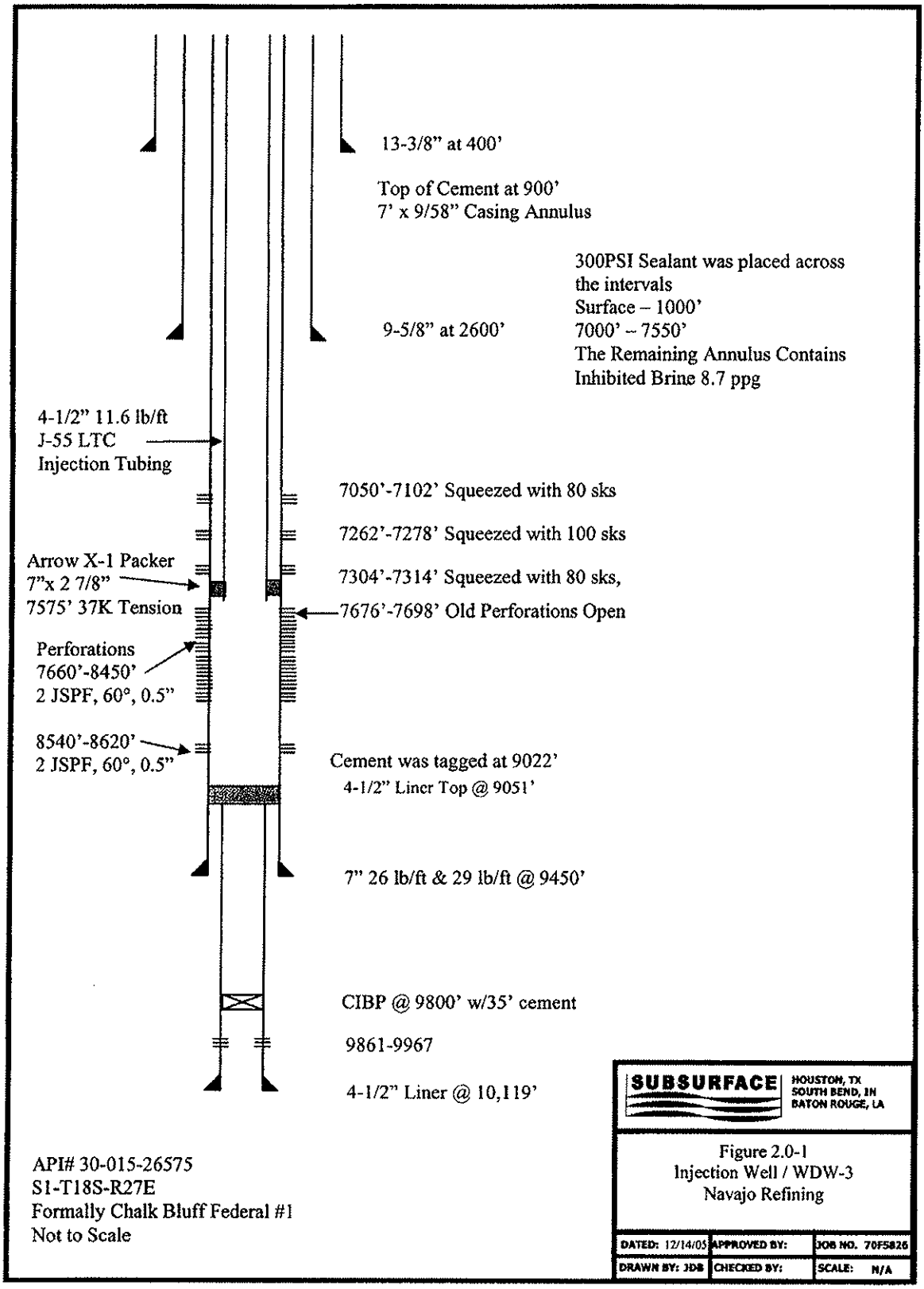
Test Witnessed By

30. List Attachments
WELL SUMMARY OF EVENTS, WELL WAS CONVERTED TO A CLASS 1 NON-HAZARDOUS WATER WASTE DISPOSAL WELL. A FULL REPORT WILL FOLLOW AT A LATER DATE.

31. *I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief*

Signature Darrell Moore Printed Name Darrell Moore Title Env. Mgr. Date 1/8/07

E-mail Address darrell.moore@navajo-refining.com



SUBSURFACE HOUSTON, TX SOUTH BEND, IN BATON ROUGE, LA

Figure 2.0-1
Injection Well / WDW-3
Navajo Refining

DATED: 12/14/05	APPROVED BY:	JOB NO. 70F5826
DRAWN BY: JDB	CHECKED BY:	SCALE: N/A

Well Summary

Navajo Refining Company (Navajo) contracted Subsurface Technology, Inc. (Subsurface), to prepare an application for permit and to reenter a plugged and abandoned (P&A) oil and gas well. The Application for Permit to Drill or Reenter and the Sundry Notices and Reports on Wells was submitted to the Department of the Interior, Bureau of Land Management (BLM), on June 29, 2006 and approved. The Application for Permit to Drill, Re-enter, Deepen, Plug Back, or add a Zone was submitted to the State of New Mexico Oil Conservation Commission (OCD) on June 29, 2006 and approved.

Subsurface prepared an engineering plan to reenter the P&A'ed oil and gas well formally owned by Mewbourne Oil Company. The original well name was Caulk Bluff Federal #1 (API number 30-015-26575), and a Change of Operator application was submitted to the OCD on December 5, 2000 and approved under the well name of WDW-3. Under contract to Navajo, Subsurface commenced field operations on September 25, 2006. The existing location was cleared and prepared for reentry operations. An earthen lined reserve pit was dug to catch returns. All depths unless stated are referenced to rig floor at six feet to seven feet above ground level. The rig floor was moved from six feet to seven feet after drilling out the cast iron bridge plugs.

A workover rig and reverse unit was placed on location and the existing wellhead was removed. The first cast iron bridge plug (CIBP) at 7010 feet was drilled and the perforated interval from 7050 feet to 7102 feet was squeezed off with neat cement and successfully pressured tested to six hundred eighty pounds per square inch gauge pressure (680 psig). The second and third CIBP at 7190 feet and 7279 feet was drilled. There appeared to be ten feet of cement on top of the third CIBP. The perforated interval from 7262 feet to 7278 feet and from 7304 feet to 7314 feet was squeezed with neat cement. The squeezed interval was pressure tested to 920 psig and would not hold. A second cement squeeze was performed across the perforated interval from 7262 feet to 7278 feet and from 7304 feet to 7314. The interval was pressured tested to 630 psig and continued to lose pressure at a rate of two pounds per square inch every thirty minutes (2 psi/30 min). The fourth CIBP at 7595 feet was drilled and at 7838 feet a cement plug was encountered and drilled through. Cement was tagged twenty nine (29) feet above the top of the liner at 9022 feet. The hole was circulated clean and prepared for logging.

A Cement Bond Log (CBL), Variable Density Log (VDL), caliper log, and temperature survey were performed. The CBL/VDL showed that the top of the cement (TOC) behind the 7-inch casing was located 900 feet from the surface. The OCD was notified and approved the existing well condition. The casing was perforated from 7660 feet to 8450 feet and from 8540 feet to 8620 feet at 2-JSPF on sixty degree (60°) phasing.

A packer was set at 7546 feet with 2 7/8-inch PH-6 tubing, the well was swabbed back and samples of the formation fluid were recovered. It was estimated that two hundred twenty six barrels (226 bbls) of formation fluid was returned to the surface. A pressure test on the annulus between the 7-inch and 2 7/8-inch was performed at 660 psig with the annulus losing pressure at a rate of 8 psi/hr.

An injection test was performed on the well down the 2 7/8-inch tubing with the annulus open to the bottom of the well. The open annulus will allow for the calculation of the bottom hole pressure while pumping down the 2 7/8-inch tubing with out the influence of tubing friction pressure on the bottom hole calculations. The injection rates were from two barrels per minute (2 bpm) to ten barrels per minute (10 bpm). From the data collected during the injection test it appears that the well will be able to accept an injection rate up to 10 bpm at the permitted pressure of 1550 psig with 4 1/2-inch, 11.6 pound per foot (11.6 lb/ft) tubing in the wellbore.

At the request of the OCD, Subsurface went back into the wellbore with a retrievable bridge plug (RBP) to test the casing and isolate any leaks to within 1000 feet. The RBP was set at 7550 feet and the packer was set at 6985 feet to isolate the squeezed interval from 7050 feet to 7314 feet. The squeezed interval was pressure tested to 490 psig and the annulus to 632 psig. The squeezed interval was losing pressure at a rate of 6 psi/hr and the annulus was gaining pressure due to thermal affects. The RBP was moved up the wellbore to 1255 feet and casing pressure tested to 569 psig. The casing above 1255 feet was losing pressure at a rate of 2 psi/hr. The casing leaks were isolated to the squeezed interval from 7050 feet to 7314 feet and in the interval from surface to 1255 feet. The OCD was called and approved the 300PSI sealing application to stop the casing leaks across the two intervals.

The 4 1/2-inch tubing was run into the wellbore and the Arrow X-1 packer was set at 7575.73 feet with 37,000 lbs of tension. Prior to running the 4 1/2-inch tubing a new Superior hanging spool was installed. Prior to setting the tubing packer, the annulus between the 4 1/2-inch tubing and the 7-inch casing was filled with inhibited brine, with the 300psi sealant across the squeezed perforations and across the upper section of the 7-inch casing. Once the packer was set and casing hung off in the spool a new Superior wellhead was installed and the P-seals were pressure tested to 3000 psig. After the wellhead was assembled the annulus was squeezed at 545 psig for four hours (4 hrs) as specified by the sealant manufacture representative on site. The annulus was then pressure tested to 480 psig overnight with no pressure loss. Workover rig was disassembled and moved off location with all associated equipment.

A 12 hr pump in and falloff test was performed down the 4 1/2-inch tubing. To maintain a surface injection pressure that was below the permitted pressure of 1550 psi the injection rate was lowered to 9 bpm at the end of the pump in procedure. The BHP gauge was placed at 8630 feet for 14 hrs to monitor BHP, when the gauge was pulled five minute (5 min) gradient stops were made every 1000 feet with the first stop at 7000 feet. The analysis of the data showed interference from the adjacent injection wells, which skewed the results for determination of the skin and possibly the permeability. The equipment used to perform the falloff testing was moved off location to prepare for mechanical integrity testing (MIT).

The MIT was performed and witnessed by the OCD. The MIT consisted of an annulus pressure test, and a radioactive tracer survey. The temperature survey was performed during the CBL/VDL logging event and will be used as a baseline for any future temperature surveys. The annulus pressure test was performed at 530 psia and lost 2.5 psi over a one hour period, which was within the OCD requirements of five percent (5%)

over a 30 min time interval. The radioactive tracer survey showed no signs of fluid flow out of the permitted interval above 7650 feet. The OCD witnessed the annular pressure test and the first half of the radioactive tracer survey.

The annulus monitoring system was installed and tested. The well was turned over to Navajo for injection.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Month - Year
FEB 15 2007
OCD - ARTESIA, NM

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☑

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☑

Operator: Navajo Refining Company Telephone: (505) 748-3311 e-mail address: _____
Address: 501 East Main Street Artesia NM 88210
Facility or well name: WDW #3 API #: 30-015-26575 U/L or Qtr/Qtr _____ Sec 1 T 18S R 27E
County: Eddy Latitude _____ Longitude _____ NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal ☑ State ☐ Private ☐ Indian ☐

Pit	Below-grade tank
Type: Drilling ☑ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☑ Unlined ☐ Liner type: Synthetic ☑ Thickness 12 mil Clay ☐ Pit Volume _____ bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) 10 (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) 0
	Ranking Score (Total Points)	10

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☐ offsite ☒ If offsite, name of facility CRI. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☑ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results.
(5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: Navajo Refining Company Plans to close Drilling pit on the WDW #3 As per New Mexico Oil Conservation Division rule 50 in the Pit and Below grade tank Guidelines. Navajo Plans to remove all fluids and Drill cuttings. All cuttings will be taken to a N.M.O.C.D. Approved site for Disposal and Backfill with onsite stockpiled soils. We Will Notify O.C.D 48 hours Prior to Beginning work.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Date: 2/14/06
Printed Name/Title Chad Milligan / Agent Signature Chad Milligan

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title Jim W. Gruy District II Supervisor Signature _____ Date: 2/12/07

Form 3160-4
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

RECEIVED JAN 1 2007 OCD - ARTESIA

1a. Type of Well: [X] Oil Well [ ] Gas Well [ ] Dry [ ] Other
b. Type of Completion: [ ] New Well [✓] Work Over [ ] Deepen [ ] Plug Back [ ] Diff. Resvr.,
Other _____

5. Lease Serial No. NM - 0557371
6. If Indian, Allottee or Tribe Name N/A
7. Unit or CA Agreement Name and No.
8. Lease Name and Well No. WDW - 3
9. AFI Well No. 30 - 015 - 26575
10. Field and Pool, or Exploratory
11. Sec., T., R., M., on Block and Survey or Area SI - T18S - R27E
12. County or Parish EDDY
13. State NM

2. Name of Operator NAVAJO REFINING COMPANY

3. Address P.O. BOX 159, ARTESIA, NM 88211
3a. Phone No. (include area code)

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface 790' FROM THE SOUTH LINE AND 2250' FROM THE WEST LINE
At top prod. interval reported below 7650' AT THE SAME LOCATION AS ABOVE
At total depth PLUG BACK 10,119' AT THE SAME LOCATION AS ABOVE

14. Date Spudded 12/22/1990
15. Date T.D. Reached 01/29/1991
16. Date Completed [ ] D & A [ ] Ready to Prod.
17. Elevations (DF, RKB, RT, GL)* 3609'

18. Total Depth: MD 10,119' TVD 10,119'
19. Plug Back T.D.: MD 9022' TVD 9022'
20. Depth Bridge Plug Set: MD CMT 9051'-9022' TVD CMT 9051'-9022'

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CBL/VDL, MULI-ARM CALIPER, TEMP, RADIOACTIVE TRACER (2006)

22. Was well cored? [✓] No [ ] Yes (Submit analysis)
Was DST run? [✓] No [ ] Yes (Submit report)
Directional Survey? [✓] No [ ] Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17 1/2"	13 3/8"	54.5	SURF	400'	400'	425 CLASS C		SURF	NONE
12 1/4"	9 5/8"	36	SURF	2604'	2604'	1025 "C"		SURF	NONE
8 3/4"	7"	29 & 26	SURF	9450'	9450'	1350 "H"		900'	NONE
6 1/4"	4 1/2"		9051'	10,119'	10,119'	175 CLASS H		9051'-TOL	NONE

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
4 1/2"	7567'	7567'						

25. Producing Intervals

Formation	Top	Bottom
A) CISCO	7650'	8450'
B) CANYON	8540'	8620'
C)		
D)		

26. Perforation Record

Perforated Interval	Size	No. Holes	Perf. Status
7660' - 8450'	0.5"	1580	2 JSPF / 60°
8540'- 8620'	0.5"	160	2 JSPF / 60°

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
7050' - 7102'	80 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATION
7262' - 7278'	100 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATION
7304' - 7314'	80 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATIONS

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									NON-HAZAROUS CLASS I WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
									WAITING ON STATE APPROVAL TO INJECT

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									NON-HAZAROUS CLASS I WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
									WAITING ON STATE APPROVAL TO INJECT

(See instructions and spaces for additional data on page 2)

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*

N/A (NON-HAZARDOUS CLASS I WELL)

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth

32. Additional remarks (include plugging procedure):

THE PLUGGED AND ABONDONED WELL WAS AQUIRED FROM MEWBOURNE OIL COMPANY BY NAVAJO REFINING. NAVAJO RECOMPLETED THE WELL FOR INJECTING NON-HAZARDOUS WASTE WATER FROM THEIR REFINERY IN ARTESIA, NM. THE EXISTING PLUGS WERE DRILLED OUT TO THE TOP OF THE LINER PLUG AT 9022' AND THE EXISTING PERFORATIONS WERE SQUEEZED OFF WITH CEMENT AT 7050' TO 7102', 7262' TO 7278', AND FROM 7304' TO 7314'. A 4 1/2" 11.6 #/FT TUBING STRING WAS SET WITH A TENSION PACKER AT 7568' AND BOTTOM OF PACKER AT 7575'. MIT WAS WITNESSED BY OCD.

(SEE ATTACHED WELL SUMMARY FOR MORE DETAILS)

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- [x] Electrical/Mechanical Logs (1 full set req'd.)
- [ ] Geologic Report
- [ ] DST Report
- [ ] Directional Survey
- [x] Sundry Notice for plugging and cement verification
- [ ] Core Analysis
- [ ] Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name *(please print)* Darrell Moore Title Env. Mgr for Water & Waste

Signature Darrell Moore Date 1/24/07

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-4
(April 2004)

JAN 1 2007
RECEIVED
OCD - ARTESIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

5. Lease Serial No. NM - 0557371

1a. Type of Well [X] Oil Well [ ] Gas Well [ ] Dry [ ] Other
b. Type of Completion: [ ] New Well [✓] Work Over [ ] Deepen [ ] Plug Back [ ] Diff. Resvr.,
Other _____

6. If Indian, Allottee or Tribe Name N/A

7. Unit or CA Agreement Name and No.

2. Name of Operator NAVAJO REFINING COMPANY

8. Lease Name and Well No. WDW - 3

3. Address P.O. BOX 159, ARTESIA, NM 88211

3a. Phone No. (include area code)

9. AFI Well No. 30 - 015 - 26575

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface 790' FROM THE SOUTH LINE AND 2250' FROM THE WEST LINE

At top prod. interval reported below 7650' AT THE SAME LOCATION AS ABOVE

At total depth PLUG BACK 10,119' AT THE SAME LOCATION AS ABOVE

10. Field and Pool, or Exploratory

11. Sec., T., R., M., on Block and Survey or Area S1 - T18S - R27E

12. County or Parish EDDY

13. State NM

14. Date Spudded 12/22/1990

15. Date T.D. Reached 01/29/1991

16. Date Completed [ ] D & A [ ] Ready to Prod.

17. Elevations (DF, RKB, RT, GL)* 3609'

18. Total Depth: MD 10,119' TVD 10,119'

19. Plug Back T.D.: MD 9022' TVD 9022'

20. Depth Bridge Plug Set: MD CMT 9051'-9022' TVD CMT 9051'-9022'

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CBL/VDL, MULI-ARM CALIPER, TEMP, RADIOACTIVE TRACER (2006)

22. Was well cored? [✓] No [ ] Yes (Submit analysis)
Was DST run? [✓] No [ ] Yes (Submit report)
Directional Survey? [✓] No [ ] Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
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12 1/4"	9 5/8"	36	SURF	2604'	2604'	1025 "C"		SURF	NONE
8 3/4"	7"	29 & 26	SURF	9450'	9450'	1350 "H"		900'	NONE
6 1/4"	4 1/2"		9051'	10,119'	10,119'	175 CLASS H		9051'-TOL	NONE

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
4 1/2"	7567'	7567'						

25. Producing Intervals

Formation	Top	Bottom
A) CISCO	7650'	8450'
B) CANYON	8540'	8620'
C)		
D)		

26. Perforation Record

Perforated Interval	Size	No. Holes	Perf. Status
7660' - 8450'	0.5"	1580	2 JSPF / 60°
8540'- 8620'	0.5"	160	2 JSPF / 60°

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
7050' - 7102'	80 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATION
7262' - 7278'	100 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATION
7364' - 7314'	80 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATIONS

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									NON-HAZAROUS CLASS I WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
									WAITING ON STATE APPROVAL TO INJECT

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									NON-HAZAROUS CLASS I WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
									WAITING ON STATE APPROVAL TO INJECT

(See instructions and spaces for additional data on page 2)

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*

N/A (NON-HAZARDOUS CLASS I WELL)

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth

32. Additional remarks (include plugging procedure):

THE PLUGGED AND ABONDONED WELL WAS AQUIRED FROM MEWBOURNE OIL COMPANY BY NAVAJO REFINING. NAVAJO RECOMPLETED THE WELL FOR INJECTING NON-HAZARDOUS WASTE WATER FROM THEIR REFINERY IN ARTESIA, NM. THE EXISTING PLUGS WERE DRILLED OUT TO THE TOP OF THE LINER PLUG AT 9022' AND THE EXISTING PERFORATIONS WERE SQUEEZED OFF WITH CEMENT AT 7050' TO 7102', 7262' TO 7278', AND FROM 7304' TO 7314'. A 4 1/2" 11.6 #/FT TUBING STRING WAS SET WITH A TENSION PACKER AT 7568' AND BOTTOM OF PACKER AT 7575'. MIT WAS WITNESSED BY OCD.

(SEE ATTACHED WELL SUMMARY FOR MORE DETAILS)

33. Indicate which itmes have been attached by placing a check in the appropriate boxes:

- [x] Electrical/Mechanical Logs (1 full set req'd.)
- [ ] Geologic Report
- [ ] DST Report
- [ ] Directional Survey
- [x] Sundry Notice for plugging and cement verification
- [ ] Core Analysis
- [ ] Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name *(please print)* Darrell Moore Title Env. Mgr for Water & Waste

Signature Darrell Moore Date 1/24/07

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OCD-ARTESIA

Form 3160-5
(April 2004)

Month - Year
MAR - 5 2007
OCD - ARTESIA, NM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OM B No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- *Other instructions on reverse side.*

5. Lease Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name
N/A

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☐ Gas Well ☑ Other

8. Well Name and No.
WDW-3

2. Name of Operator
NAVAJO REFINIG COMPANY

9. API Well No.
30 - 015 - 26575

3a. Address
P.O. BOX 159, ARTESIA, NM 88211

3b. Phone No. *(include area code)*

10. Field and Pool, or Exploratory Area

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
S1 - T18S - R27E ; 790' FROM THE SOUTH LINE AND 2250' FROM THE WEST LINE

11. County or Parish, State
EDDY

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☑ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☑ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other NON-HAZARDOUS CLASS I WELL
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☑ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

THE PLUGGED AND ABONDONED WELL WAS AQUIRED FROM MEWBOURNE OIL COMPANY BY NAVAJO REFINING. NAVAJO RECOMPLETED THE WELL FOR INJECTING NON-HAZARDOUS WASTE WATER FROM THEIR REFINERY IN ARTESIA, NM.

10/1/06 -THE EXISTING PLUGS WERE DRILLED OUT TO THE TOP OF THE LINER PLUG AT 9022' AND THE EXISTING PERFORATIONS WERE SQUEEZED OFF WITH NEAT CEMENT AT 7050' TO 7102', 7262' TO 7278', AND FROM 7304' TO 7314'.

10/13/06 - RAN CBL/VDL AND TEMPERATURE SURVEY, PERFORATED INTERVAL FROM 7650' TO 8450' AND FROM 8540' TO 8620'.

10/24/06 - A 4 1/2" 11.6 #/FT TUBING STRING WAS SET WITH A TENSION PACKER AT 7568' AND BOTTOM OF PACKER AT 7575'.

11/4/06 - PERFROMED AN INJECTION/FALLOFF TEST ON THE WELL AT 9 TO 10 BPM.

11/15/06 - MECHANICALLY INTEGRITY TEST WERE PERFORMED AND WITNESSED BY THE OCD. THE MECHANICALLY INTEGRITY TEST CONSISTED OF RADIOACTIVE TRACER TEST AND AN ANNULUS PRESSURE TEST. (SEE THE ATTACHED WELL SUMMARY FOR MORE DETAILS.)

SUBJECT TO LIKE APPROVAL BY STATE

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)* Darrell Moore — Title Env. Mgr. for Water + Waste
Signature Darrell Moore — Date 1/24/07

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

ACCEPTED FOR RECORD

Approved by _____ Title _____ Date FEB 28 2007

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Office

FREDERICK WRIGHT
PETROLEUM ENGINEER

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3 - 4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

This information is being collected to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer, (WO-630), Mail Stop 401 LS, 1849 C St., N.W., Washington D.C. 20240

SUNDRY NOTICE SPECIAL STIPULATIONS

1. **Approval is granted for the water disposal method presented in the sundry subject to the following conditions:**

2. The operator must provide a water analysis of the water to be injected, together with a copy of the disposal permit granted by the state.

****** Approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.**

Engineering
can be reached at 505-706-2779 for any variances that might be necessary.

F Wright 2/28/07

OCD-ARTESIA

Form 3160-4
(April 2004)

Month - Year
7 - 5 2007
ARTESIA, NM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

5. Lease Serial No. NM - 0557371

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12. County or Parish EDDY

13. State NM

1a. Type of Well [ ] Oil Well [ ] Gas Well [ ] Dry [ ] Other

b. Type of Completion: [ ] New Well [✓] Work Over [ ] Deepen [ ] Plug Back [ ] Diff. Resvr, .
Other _____

2. Name of Operator NAVAJO REFINING COMPANY

3. Address P.O. BOX 159, ARTESIA, NM 88211

3a. Phone No. (include area code)

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface 790' FROM THE SOUTH LINE AND 2250' FROM THE WEST LINE

At top prod. interval reported below 7650' AT THE SAME LOCATION AS ABOVE

At total depth PLUG BACK 10,119' AT THE SAME LOCATION AS ABOVE

14. Date Spudded 12/22/1990

15. Date T.D. Reached 01/29/1991

16. Date Completed [ ] D & A [ ] Ready to Prod.

17. Elevations (DF, RKB, RT, GL)* 3609'

18. Total Depth: MD 10,119' TVD 10,119'

19. Plug Back T.D.: MD 9022' TVD 9022'

20. Depth Bridge Plug Set: MD CMT 9051'-9022' TVD CMT 9051'-9022'

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CBL/VDL, MULI-ARM CALIPER, TEMP, RADIOACTIVE TRACER (2006)

22. Was well cored? [✓] No [ ] Yes (Submit analysis)
Was DST run? [✓] No [ ] Yes (Submit report)
Directional Survey? [✓] No [ ] Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17 1/2"	13 3/8"	54.5	SURF	400'	400'	425 CLASS C		SURF	NONE
12 1/4"	9 5/8"	36	SURF	2604'	2604'	1025 "C"		SURF	NONE
8 3/4"	7"	29 & 26	SURF	9450'	9450'	1350 "H"		900'	NONE
6 1/4"	4 1/2"		9051'	10,119'	10,119'	175 CLASS H		9051'-TOL	NONE

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
4 1/2"	7567'	7567'						

25. Producing Intervals

Formation	Top	Bottom
A) CISCO	7650'	8450'
B) CANYON	8540'	8620'
C)		
D)		

26. Perforation Record

Perforated Interval	Size	No. Holes	Perf. Status
7660' - 8450'	0.5"	1580	2 JSPF / 60°
8540'- 8620'	0.5"	160	2 JSPF / 60°

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
7050' - 7102'	80 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATION
7262' - 7278'	100 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATION
7304' - 7314'	80 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATIONS

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									NON-HAZAROUS CLASS I WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
									WAITING ON STATE APPROVAL TO INJECT

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									NON-HAZAROUS CLASS I WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
									WAITING ON STATE APPROVAL TO INJECT

*(See instructions and spaces for additional data on page 2)

ACCEPTED FOR RECORD
FEB 28 2007
FREDERICK WRIGHT
PETROLEUM ENGINEER

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*

N/A (NON-HAZARDOUS CLASS I WELL)

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth

32. Additional remarks (include plugging procedure):

THE PLUGGED AND ABONDONED WELL WAS AQUIRED FROM MEWBOURNE OIL COMPANY BY NAVAJO REFINING. NAVAJO RECOMPLETED THE WELL FOR INJECTING NON-HAZARDOUS WASTE WATER FROM THEIR REFINERY IN ARTESIA, NM. THE EXISTING PLUGS WERE DRILLED OUT TO THE TOP OF THE LINER PLUG AT 9022' AND THE EXISTING PERFORATIONS WERE SQUEEZED OFF WITH CEMENT AT 7050' TO 7102', 7262' TO 7278', AND FROM 7304' TO 7314'. A 4 1/2" 11.6 #/FT TUBING STRING WAS SET WITH A TENSION PACKER AT 7568' AND BOTTOM OF PACKER AT 7575'. MIT WAS WITNESSED BY OCD.

(SEE ATTACHED WELL SUMMARY FOR MORE DETAILS)

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- [x] Electrical/Mechanical Logs (1 full set req'd.)
- [ ] Geologic Report
- [ ] DST Report
- [ ] Directional Survey
- [x] Sundry Notice for plugging and cement verification
- [ ] Core Analysis
- [ ] Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name *(please print)* Darrell Moore Title Env. Mgr for Water & Waste

Signature Darrell Moore Date 1/24/07

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

INSTRUCTIONS

GENERAL: This form is designed for submitting a complete and correct well completion/recompletion report and log on all types of wells on Federal and Indian leases to a Federal agency, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal office.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, and all types electric), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal laws and regulations. All attachments should be listed on this form, see item 33.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal office for specific instructions.

ITEM 17: Indicate which reported elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

ITEM 23: Show how reported top(s) of cement were determined, i.e. circulated (CIR), or calculated (CAL), or cement bond log (CBL), or temperature survey (TS).

PRIVACY ACT

The Privacy Act of 1974 and the regulation in 43 CFR 2.48 (d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. et seq.; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is to be used to evaluate the actual operations performed in the drilling, completing and testing of a well on a Federal or Indian lease.

ROUTINE USES: (1) Evaluate the equipment and procedures used during the drilling and completing/recompleting of a well. (2) The review of geologic zones and formation encountered during drilling. (3) Analyze future applications to drill in light of data obtained and methods used. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this report and disclosure of the information is mandatory once a well drilled on a Federal or Indian lease is completed/recompleted.

The Paperwork Reduction Act of 1995 requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling and completing/recompleting wells on Federal and Indian oil and gas leases.

This information will be used to analyze operations and to compare equipment and procedures actually used with those proposed and approved.

Response to this request is mandatory only if the operator elects to initiate drilling and completing/recompleting operations on an oil and gas lease.

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 60 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer, (WO-630), MS 401 LS, 1849 C Street, N.W., Washington, D.C. 20240.

Well Summary

Navajo Refining Company (Navajo) contracted Subsurface Technology, Inc. (Subsurface), to prepare an application for permit and to reenter a plugged and abandoned (P&A) oil and gas well. The Application for Permit to Drill or Reenter and the Sundry Notices and Reports on Wells was submitted to the Department of the Interior, Bureau of Land Management (BLM), on June 29, 2006 and approved. The Application for Permit to Drill, Re-enter, Deepen, Plug Back, or add a Zone was submitted to the State of New Mexico Oil Conservation Commission (OCD) on June 29, 2006 and approved.

Subsurface prepared an engineering plan to reenter the P&A'ed oil and gas well formally owned by Mewbourne Oil Company. The original well name was Caulk Bluff Federal #1 (API number 30-015-26575), and a Change of Operator application was submitted to the OCD on December 5, 2000 and approved under the well name of WDW-3. Under contract to Navajo, Subsurface commenced field operations on September 25, 2006. The existing location was cleared and prepared for reentry operations. An earthen lined reserve pit was dug to catch returns. All depths unless stated are referenced to rig floor at six feet to seven feet above ground level. The rig floor was moved from six feet to seven feet after drilling out the cast iron bridge plugs.

A workover rig and reverse unit was placed on location and the existing wellhead was removed. The first cast iron bridge plug (CIBP) at 7010 feet was drilled and the perforated interval from 7050 feet to 7102 feet was squeezed off with neat cement and successfully pressured tested to six hundred eighty pounds per square inch gauge pressure (680 psig). The second and third CIBP at 7190 feet and 7279 feet was drilled. There appeared to be ten feet of cement on top of the third CIBP. The perforated interval from 7262 feet to 7278 feet and from 7304 feet to 7314 feet was squeezed with neat cement. The squeezed interval was pressure tested to 920 psig and would not hold. A second cement squeeze was performed across the perforated interval from 7262 feet to 7278 feet and from 7304 feet to 7314. The interval was pressured tested to 630 psig and continued to lose pressure at a rate of two pounds per square inch every thirty minutes (2 psi/30 min). The fourth CIBP at 7595 feet was drilled and at 7838 feet a cement plug was encountered and drilled through. Cement was tagged twenty nine (29) feet above the top of the liner at 9022 feet. The hole was circulated clean and prepared for logging.

A Cement Bond Log (CBL), Variable Density Log (VDL), caliper log, and temperature survey were performed. The CBL/VDL showed that the top of the cement (TOC) behind the 7-inch casing was located 900 feet from the surface. The OCD was notified and approved the existing well condition. The casing was perforated from 7660 feet to 8450 feet and from 8540 feet to 8620 feet at 2-JSPF on sixty degree (60°) phasing.

A packer was set at 7546 feet with 2 7/8-inch PH-6 tubing, the well was swabbed back and samples of the formation fluid were recovered. It was estimated that two hundred twenty six barrels (226 bbls) of formation fluid was returned to the surface. A pressure test on the annulus between the 7-inch and 2 7/8-inch was performed at 660 psig with the annulus losing pressure at a rate of 8 psi/hr.

An injection test was performed on the well down the 2 7/8-inch tubing with the annulus open to the bottom of the well. The open annulus will allow for the calculation of the bottom hole pressure while pumping down the 2 7/8-inch tubing with out the influence of tubing friction pressure on the bottom hole calculations. The injection rates were from two barrels per minute (2 bpm) to ten barrels per minute (10 bpm). From the data collected during the injection test it appears that the well will be able to accept an injection rate up to 10 bpm at the permitted pressure of 1550 psig with 4 1/2-inch, 11.6 pound per foot (11.6 lb/ft) tubing in the wellbore.

At the request of the OCD, Subsurface went back into the wellbore with a retrievable bridge plug (RBP) to test the casing and isolate any leaks to within 1000 feet. The RBP was set at 7550 feet and the packer was set at 6985 feet to isolate the squeezed interval from 7050 feet to 7314 feet. The squeezed interval was pressure tested to 490 psig and the annulus to 632 psig. The squeezed interval was losing pressure at a rate of 6 psi/hr and the annulus was gaining pressure due to thermal affects. The RBP was moved up the wellbore to 1255 feet and casing pressure tested to 569 psig. The casing above 1255 feet was losing pressure at a rate of 2 psi/hr. The casing leaks were isolated to the squeezed interval from 7050 feet to 7314 feet and in the interval from surface to 1255 feet. The OCD was called and approved the 300PSI sealing application to stop the casing leaks across the two intervals.

The 4 1/2-inch tubing was run into the wellbore and the Arrow X-1 packer was set at 7575.73 feet with 37,000 lbs of tension. Prior to running the 4 1/2-inch tubing a new Superior hanging spool was installed. Prior to setting the tubing packer, the annulus between the 4 1/2-inch tubing and the 7-inch casing was filled with inhibited brine, with the 300psi sealant across the squeezed perforations and across the upper section of the 7-inch casing. Once the packer was set and casing hung off in the spool a new Superior wellhead was installed and the P-seals were pressure tested to 3000 psig. After the wellhead was assembled the annulus was squeezed at 545 psig for four hours (4 hrs) as specified by the sealant manufacture representative on site. The annulus was then pressure tested to 480 psig overnight with no pressure loss. Workover rig was disassembled and moved off location with all associated equipment.

A 12 hr pump in and falloff test was performed down the 4 1/2-inch tubing. To maintain a surface injection pressure that was below the permitted pressure of 1550 psi the injection rate was lowered to 9 bpm at the end of the pump in procedure. The BHP gauge was placed at 8630 feet for 14 hrs to monitor BHP, when the gauge was pulled five minute (5 min) gradient stops were made every 1000 feet with the first stop at 7000 feet. The analysis of the data showed interference from the adjacent injection wells, which skewed the results for determination of the skin and possibly the permeability. The equipment used to perform the falloff testing was moved off location to prepare for mechanical integrity testing (MIT).

The MIT was performed and witnessed by the OCD. The MIT consisted of an annulus pressure test, and a radioactive tracer survey. The temperature survey was performed during the CBL/VDL logging event and will be used as a baseline for any future temperature surveys. The annulus pressure test was performed at 530 psia and lost 2.5 psi over a one hour period, which was within the OCD requirements of five percent (5%)

over a 30 min time interval. The radioactive tracer survey showed no signs of fluid flow out of the permitted interval above 7650 feet. The OCD witnessed the annular pressure test and the first half of the radioactive tracer survey.

The annulus monitoring system was installed and tested. The well was turned over to Navajo for injection.

LOGGING SERVICES

R/A TRACER LOG INTERPRETATION

11/27/2006

PLANT: NAVAJO REFINING CO.
C/O: SUBSURFACE TECHNOLOGY
WELL NAME: CHALK BLUFF FEDERAL # 1 WDW # 3

RE: Radioactive Tubing & Packer Survey ran on 11/18/2006

A Pre Base Log was run from 9020' to 7350' to detect and record background gamma counts.

Iodine 131 was then ejected at a depth of 7375' and pumped down the tubing and into the permitted interval. Overlapping logging passes tracked the R/A tracer material as it moved down in the wellbore. The R/A material was seen traveling down the tubing, past the packer, and exiting the permitted injection interval.

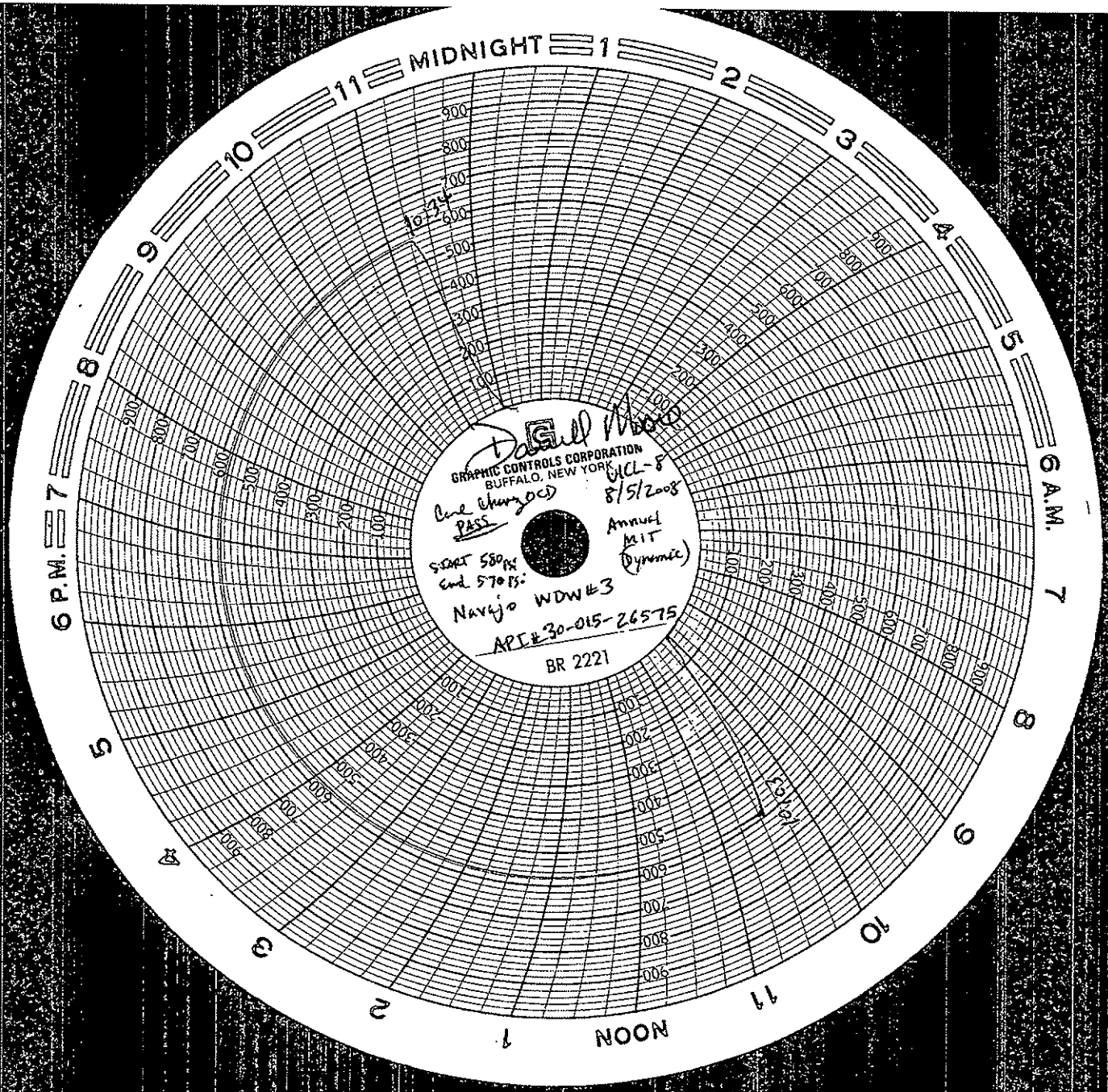
The flow profile log was then repeated and this survey also showed R/A material going out into the permitted interval.

Two Stationary Time Drive surveys were run with the tool at 7640'. No indications of upward migration were recorded.

A Post Base log was then run from 9016' to 7342' and noted that all R/A material was flushed out of the wellbore into the permitted interval.

John Croce

John Croce


MIDNIGHT
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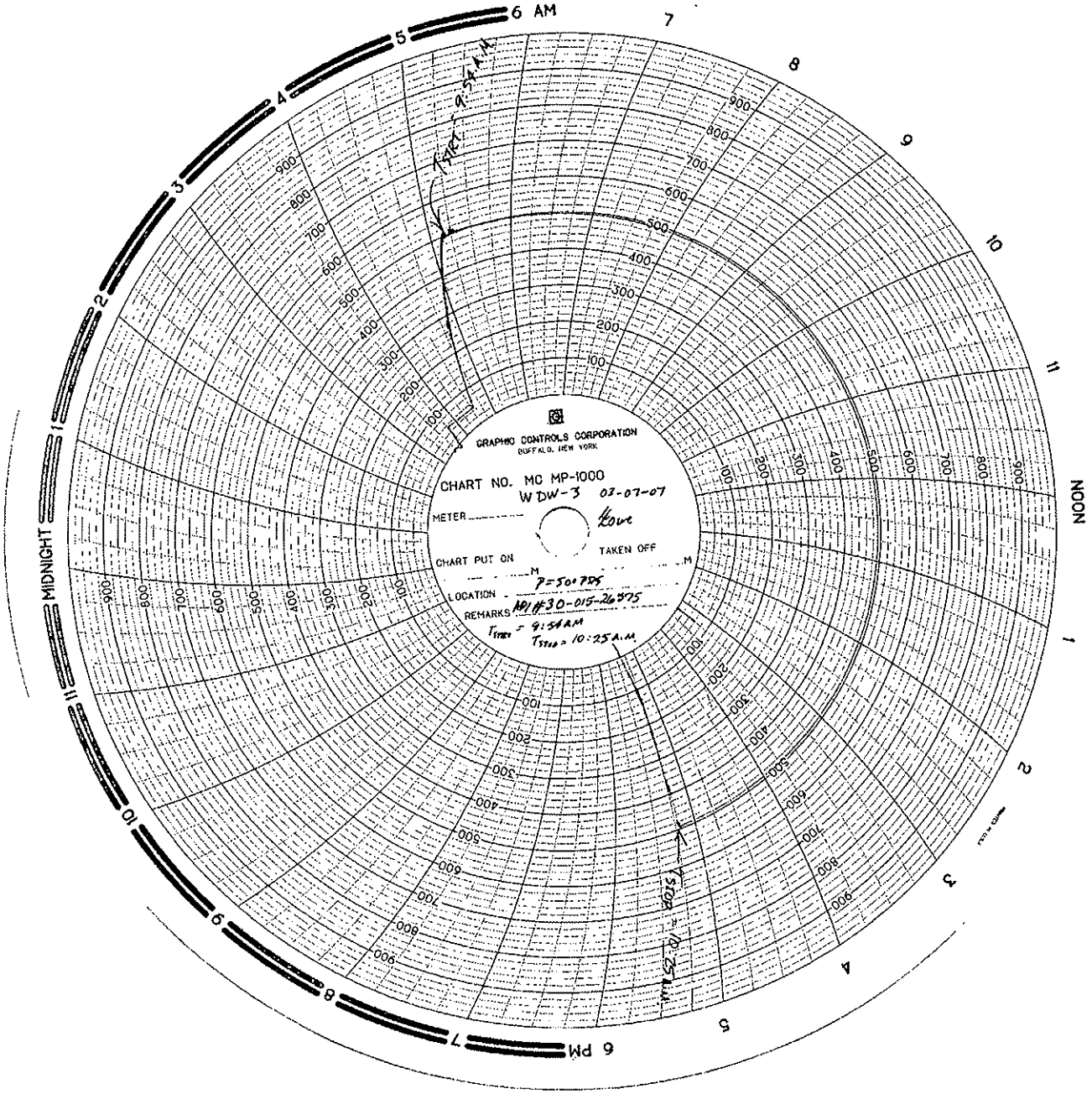
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
Line Change OCD
PASS
Start 580 PSI
End 570 PSI
Navajo WDW #3
API # 30-015-26575
BR 2221
UCL-8
8/5/2008
Annual MIT (Dynamic)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GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
CHART NO. MC MP-1000
WDW-3 03-07-07
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REMARKS
API #30-015-26575
T_{start} = 9:54 AM
T_{stop} = 10:25 A.M.
Start 9:54 AM
Stop 10:25 AM

Oil Conservation Division, Environmental Bureau
C/O: Carl Chavez
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of Test June 30, 2010 Operator Navajo Refining API #30-015-26575

Property Name WDW Well No. 3 Location: Unit O Section 1 Township 18S Range 27E

Well Status ~~(Shut-In or Producing)~~ Injecting Tubing____ Intermediate____ Casing____ Bradenhead____

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

TIME	PRESSURES: BRADENHEAD	INTERMEDIATE	CASING
5 minutes	0	0	
10 minutes	N/A	N/A	
15 minutes	N/A	N/A	
20 minutes	N/A	N/A	
25 minutes	N/A	N/A	
30 minutes	N/A	N/A	

	BRADENHEAD FLOWED	INTERMEDIATE FLOWED
Steady Flow	N/A	N/A
Surges	N/A	N/A
Down to Nothing	immediately	immediately
Nothing	X	X
Gas	N/A	N/A
Gas & Water	N/A	N/A
Water	N/A	N/A

If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR____ FRESH____ SALTY____ SULFUR____ BLACK____

5 MINUTE SHUT-IN BRADENHEAD 0 INTERMEDIATE 0

REMARKS:
Both the surface and intermediate bradenheads were opened one at a time. Both had a puff of air upon opening the valve (from heat build-up) and then nothing. No flow. No pressure.

By Darrell Moore Darrell Moore Witness

Env. Mgr. for Water & Waste Navajo Refining
(Position)

E-mail address darrell.moore@hollycorp.com

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GRAPHIC CONTROLS CORPORATION
BUFFALO NEW YORK
Navajo Refining
MPU-3 Sec 18 T21N
4/26/10
BR 2221

Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Friday, March 05, 2010 8:51 AM
To: Chavez, Carl J, EMNRD
Subject: WDW-3 Qtrl MIT

Carl

Attached, please find the chart for the MIT we did on our WDW-3 on February 24, 2010. We also opened the did a bradenhead test and there was no sustained pressure. There was a slight puff but it dissipated quickly and can be attributed to temperature changes.

If there are any questions concerning this submission, please call me at 575-746-5281.

Darrell Moore

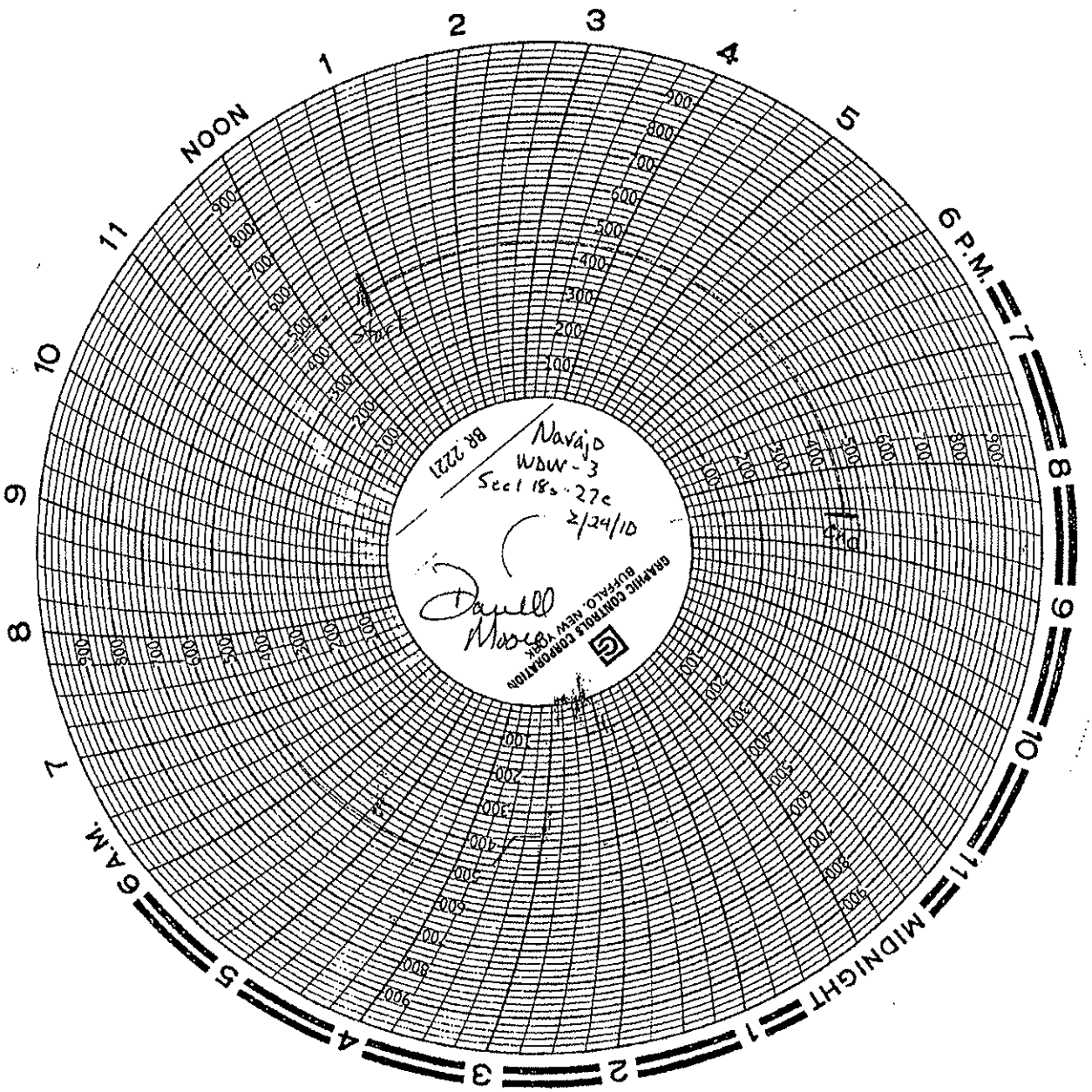
Environmental Manager for Water and Waste

Navajo Refining Company, LLC

Phone Number 575-746-5281

Cell Number 575-703-5058

Fax Number 575-746-5451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BR 2221
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, July 06, 2010 9:04 AM
To: 'Moore, Darrell'
Subject: RE: Sewer Testing

Darrell:

Thanks for the notification.

Also, the OCD needs Navajo to complete the quarterly Bradenhead information on the form provided to you last week for our records. Let me know if you have any questions. Staff in Artesia questioned the 30 minutes in the form, and I determine that Navajo just needs to use the form to document compliance with our quarterly Bradenhead testing requirement for WDW-3. The MITs for Class I Wells need to be completed by 9/30/2010 along with Annual Fall-Off Test. OCD can use the MIT pressure chart for WDW-3 to satisfy the MIT requirement this season.

Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

From: Moore, Darrell [mailto:Darrell.Moore@hollycorp.com]
Sent: Tuesday, July 06, 2010 7:24 AM
To: Chavez, Carl J, EMNRD
Subject: Sewer Testing

Carl

We will be testing sewers in the Vacuum Unit at the Artesia Refinery on Friday July 9, 2010 starting at 8 am. If OCD would like to witness let me know.

Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, LLC
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

Oil Conservation Division, Environmental Bureau
C/O: Carl Chavez
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of Test June 30, 2010 Operator Navajo Refining API #30-015-26575

Property Name WDW Well No. 3 Location: Unit O Section 1 Township 18S Range 27E

Well Status ~~(Shut-In or Producing)~~ Injecting Tubing ____ Intermediate ____ Casing ____ Bradenhead ____

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

TIME	PRESSURES: BRADENHEAD	INTERMEDIATE	CASING
5 minutes	0	0	
10 minutes	N/A	N/A	
15 minutes	N/A	N/A	
20 minutes	N/A	N/A	
25 minutes	N/A	N/A	
30 minutes	N/A	N/A	

	BRADENHEAD FLOWED	INTERMEDIATE FLOWED
Steady Flow	N/A	N/A
Surges	N/A	N/A
Down to Nothing	immediately	immediately
Nothing	X	X
Gas	N/A	N/A
Gas & Water	N/A	N/A
Water	N/A	N/A

If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR ____ FRESH ____ SALTY ____ SULFUR ____ BLACK ____

5 MINUTE SHUT-IN BRADENHEAD 0 INTERMEDIATE 0

REMARKS:
Both the surface and intermediate bradenheads were opened one at a time. Both had a puff of air upon opening the valve (from heat build-up) and then nothing. No flow. No pressure.

By Darrell Moore Darrell Moore Witness ____

Env. Mgr. for Water & Waste Navajo Refining
(Position)

E-mail address darrell.moore@hollycorp.com

Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Wednesday, June 30, 2010 1:47 PM
To: Chavez, Carl J, EMNRD; Dade, Randy, EMNRD
Subject: FW:
Attachments: WDW-3.pdf

Gentlemen,

Attached, please find the quarterly MIT for Navajo's WDW-3 Injection well located in Sec 1, 18 south 27 east. If there are any questions concerning this submission, please call me at 575-746-5281.

From: Hernandez, Carrie
Sent: Wednesday, June 30, 2010 1:44 PM
To: Moore, Darrell
Subject:

Carrie Hernandez
Environmental Administrative Assistant
Navajo Refining Co. LLC
Direct Line 575-748-6733
Direct Fax 575-746-5451
Life is a Journey. Roll down the Windows and Enjoy the Breeze

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GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
Navajo Refining
WDW-3 Sec 1 R3 22E
4/26/10
BR 2221

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised August 1, 2011

WELL API NO. **30-015-26575**

5. Indicate Type of Lease STATE ☒ FEE ☐

6. State Oil & Gas Lease No. **NM-0557371**

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name **Gaines WDW-3**

1. Type of Well: Oil Well ☐ Gas Well ☐ Other **Injection Well**

8. Well Number **WDW-3**

2. Name of Operator **Navajo Refining Company**

9. OGRID Number

3. Address of Operator **Post Office Box 159, Artesia, New Mexico 88211**

10. Pool name or Wildcat: **Navajo Permo-Penn**

4. Well Location
Unit Letter **N** : **790** feet from the **South** line and **2250** feet from the **West** line
Section **01** Township **18S** Range **27E** NMPM County **Eddy**

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* **3609' GL, ' RKB**

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: **PERFORM PRESSURE FALLOFF TEST** ☒		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

December 12, 2011 –Install bottomhole gauges into WDW-1, WDW-2, and WDW-3 by 11:45am. Continue injection into all three wells.
December 13, 2011 – Continue injection into all three wells.
December 14, 2011 – At 12:15pm, the offset wells WDW-1 and WDW-2 will be shut-in. A constant injection rate will be established for WDW-3 and continue for a 30 hour injection period. Do not exceed 1000 psig wellhead pressure.
December 15, 2011 – At 7:00pm, WDW-3 will be shut in for a 30-hour falloff period. WDW-1 and WDW-2 will remain shut-in.
December 16, 2011 – All three wells will continue to be shut in while monitoring falloff pressure in all three wells.
December 17, 2011 – At 7:00am, acquire downhole pressure gauges from all three wells. Tag bottom of fill and come out of hole very slowly, making 7-minute gradient stops while coming out of WDW-3 every 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 ft, 3000 ft, 2000 ft, 1000 ft, surface). Run in hole with a temperature tool and conduct temperature survey from the surface to the top of the fill. Turn the wells back to Navajo personnel.

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Timothy Jones TITLE Project Engineer DATE 10/3/2011

Type or print name Timothy Jones E-mail address: tjones@subsurfacegroup.com PHONE: 713-880-4640

For State Use Only

APPROVED BY: Carl J. Chaney TITLE Environmental Engineer DATE 10/19/2011

Conditions of Approval (if any): See E-mail conditions dated 10/19/2011 attached to WDW-1.

Chavez, Carl J, EMNRD

rom: Chavez, Carl J, EMNRD
Sent: Wednesday, October 19, 2011 4:06 PM
To: 'Moore, Darrell'
Cc: Sanchez, Daniel J., EMNRD; VonGonten, Glenn, EMNRD; Dade, Randy, EMNRD
Subject: Navajo Refining Company UIC Class I (NH) Injection Wells WDWs 1, 2 & 3 (UICI-008) Fall Off Test Plan (August 2011)

Darrell:

The New Mexico Oil Conservation Division (OCD) is in receipt of your above subject test plan. OCD has already approved the Fall-Off Test (FOT) Plan with conditions on July 28, 2009. The OCD notes that it is also in the process of reviewing C-103s Sundry Notices for the upcoming FOTs.

OCD observes some changes in this FOT Plan submittal that are not acceptable to the OCD. For example, Exhibit 1 is not an acceptable exhibit to the OCD for reasons specified in the 2010 FOT report review and later during the May 2011 meeting in Santa Fe. However, the operator continues to submit exhibits with certain assumptions that have not been accepted or approved by the OCD, i.e., that the injection wells are show interconnection with the injection zone during past FOTs. Perhaps the operator can conduct the 2011 FOT with the information and exhibits needed to prove the interconnection of injection wells with the injection zone? The Certified PE should provide the exhibits in the 2011 FOT Report with the analysis and conclusions supporting any claims for the OCD to review and consider before approving. This is apparently a FOT frequency per well issue that the operator is attempting to prove.

The OCD provides the following comments, observations, and/or recommendations on the above subject plan below.

Comments:

- The OCD approved the original Fall-Off Test (FOT) Plan based on OCD Guidance dated December 3, 2007. There should not be any significant changes to this FOT Plan because it is flexible where needed to allow operators to implement it on each injection well.
- OCD likes to be notified to witness the installation of bottom hole gauges and to be present at least one hour before injection shut-off and commencement of FOT monitoring.
- OCD is concerned about the Section VI No. 1(e) WDW-3 Cement Bond Log quality being poor from 900 ft. to 1200 ft- especially at the depths: 2662 – 2160; 4876 – 5372; and 6750 – 7600 ft. micro annulus scenario.

Observations:

- Section V No. 2: The objective of the FOT is NOT to achieve or limit a 100 psig pressure differential before vs. after FOT injection vs. shut-off, but it is a minimum pressure differential that OCD stipulates in its guidance for a successful FOT and injection zone that may still continue to be utilized for disposal, i.e., not too pressured up and subject to continued fracturing under daily allowed maximum surface injection pressure operational limits.
- Section V No. 7 and Exhibit 1: OCD observes a bottom hole pressure chart for WDWs 1, 2 and 3 at 7660 feet that the operator presented in the 2010 FOT and again during a May 2011 meeting in Santa Fe, New Mexico to show the interconnection between injection wells and the injection formation. The OCD had commented that there was no explanation or conclusion provided from the Certified PE who conducted and completed the 2010 FOT report that supports the operator's claim that all injection wells are interconnected based on Exhibit 1.

  Furthermore, the OCD requested a statement or information supporting the operator's claim by the Certified PE, but never received one. At the meeting, the OCD explained that based on Exhibit 1, there was no support for the claim. In order to make the interconnection determination, during each FOT at each well and off-set injection wells (WDWs not being FOT'd) before and throughout the FOT would need bottom hole pressures monitored in tandem at each well location to establish the interconnectivity of the injection wells with the receiving injection formation under a uniform time scale. This would be a chart that could be plotted that would show during the test the interconnectivity of the wells for each FOT. The OCD doubts that the operator can make the case for interconnectivity between injection wells and injection formation because of the significant distance between the injection wells and fact that sedimentation in formation varies laterally and uniformity in sedimentation, saturated porosity and permeability due to variation in sedimentation would by chance make the injection formation aerially extensive and uniform over a 3 to 5 mile radius from each injection well. Also, even if by chance there was

uniformity over the mileage specified, the distance between injection wells and corresponding pressure would likely not be observed.

- Exhibit 6: OCD observes in Section B a proposed MIT once every 5 years. OCD's UIC Program requires annual MITs and/or after down hole work is performed on a well.

Recommendations:

- Operator is running survey logs to the bottom of fill or below USDW (fresh water) zones, which excludes an evaluation of casing in the fresh water zone. Please run logs up to surface.
- Be sure to also record and provide injection flow rate and pressure leading up to shut-off and monitoring throughout the FOT monitoring period. OCD needs to confirm that a pseudo steady-state condition was achieved before shut-off. This data is also needed for software modeling of the FOT.
- Please provide electronic data from the FOTs at each well in order for the OCD to run its software model to confirm the results in the report.
- Section V No. 13: Surface pressure monitoring and Horner Plot during injection should be used to confirm radial flow condition is achieved instead of waiting a set period if operator wishes to reduce the injection period.

Disclaimer: *Please be advised that OCD has already approved with conditions Navajo Refining Company's Fall-Off Test (FOT) Plan on July 28, 2009, and is not providing approval of this FOT Plan; however, comments, observations and recommendations herein should help Navajo Refining Company understand the OCD's concerns based on the submittal.*

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/
Why not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward with the Rest of the Nation?" To see how, go to "Pollution Prevention & Waste Minimization" at:
http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental)

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N French Dr, Hobbs, NM 88240
District II – (575) 748-1283
811 S First St, Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd, Aztec, NM 87410
District IV – (505) 476-3460
1220 S St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised August 1, 2011

WELL API NO. **30-015-26575**

5. Indicate Type of Lease STATE ☒ FEE ☐

6. State Oil & Gas Lease No. **NM-0557371**

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)

7. Lease Name or Unit Agreement Name **Gaines WDW-3**

1. Type of Well: Oil Well ☐ Gas Well ☐ Other **Injection Well**

8. Well Number **WDW-3**

2. Name of Operator **Navajo Refining Company**

9. OGRID Number

3. Address of Operator **Post Office Box 159, Artesia, New Mexico 88211**

10. Pool name or Wildcat: **Navajo Permo-Penn**

4. Well Location
Unit Letter **N** : **790** feet from the **South** line and **2250** feet from the **West** line
Section **01** Township **18S** Range **27E** NMPM County **Eddy**

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* **3609' GL, ' RKB**

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: **PERFORM PRESSURE FALLOFF TEST** ☒		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions. Attach wellbore diagram of proposed completion or recompletion.

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SRDade 10/11/11
Accepted for record
NMOCD

RECEIVED
OCT 07 2011
NMOCD ARTESIA

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Timothy Jones TITLE Project Engineer DATE 10/3/2011

Type or print name Timothy Jones E-mail address: tjones@subsurfacegroup.com PHONE: 713-880-4640

For State Use Only

APPROVED BY:_____ TITLE_____ DATE_____

Conditions of Approval (if any):

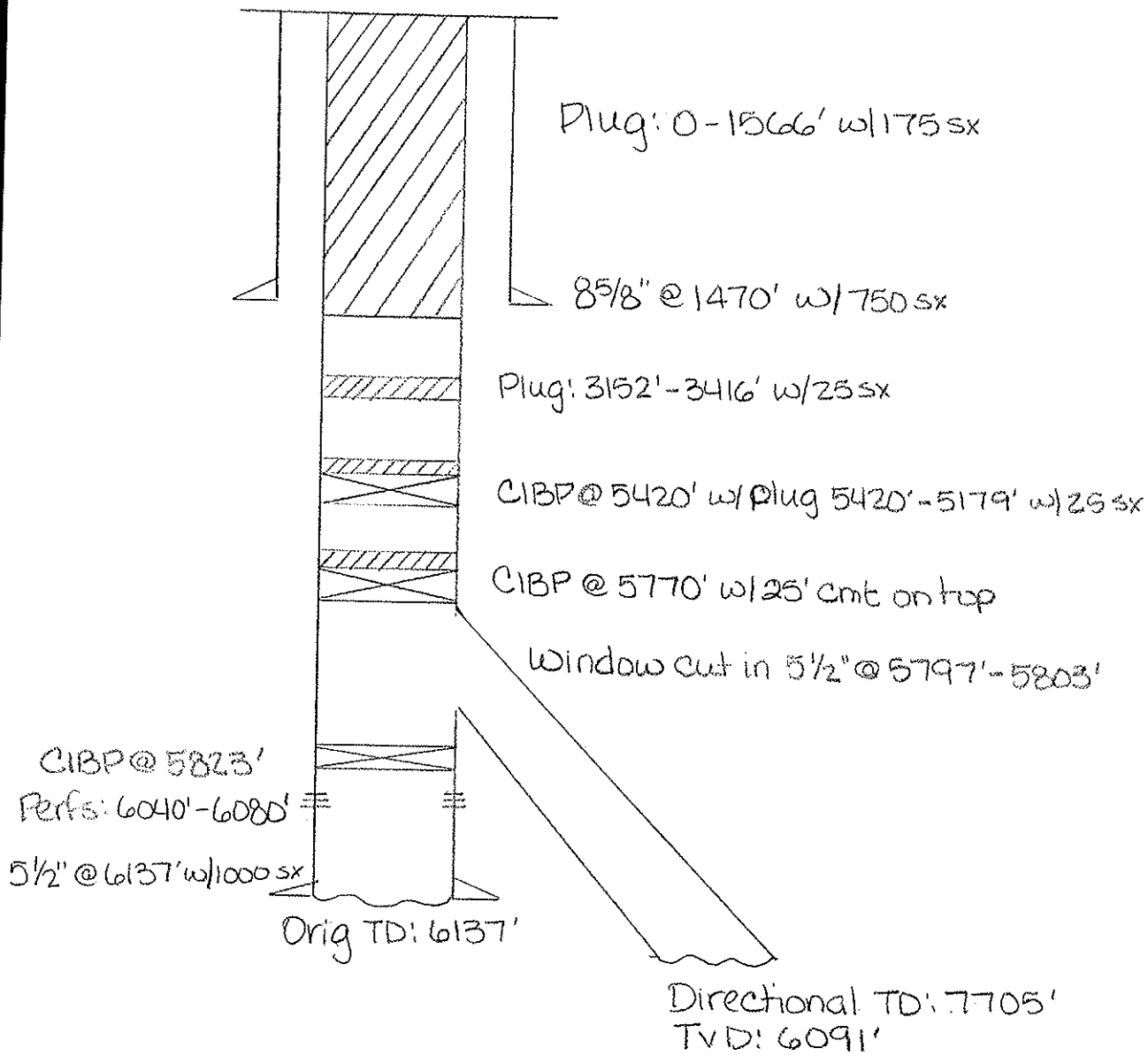
SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 90
Artificial Penetration Review

OPERATOR BP America Prod.
LEASE Empire ABO Unit
WELL NUMBER 17A
DRILLED 3-26-59
PLUGGED 12-01-08

STATUS Plugged
LOCATION Sec. 1 -T18S-R27E
MUD FILLED BOREHOLE NA
TOP OF INJECTION ZONE ~7221' Est.
API NO. 30-015- 00703

REMARKS:



Form 9-331a
(Feb. 1951)

COPY TO O. C. C.

APPROVED
FEB 18 1959
ROBERT E. EVANS
ACTING DISTRICT ENGINEER

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Land Office Las Cruces

Lease No. LC 062412

Unit

SUNDRY NOTICES AND REPORTS ON WELLS

1-SF

NOTICE OF INTENTION TO DRILL	XX	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Water Basin

USA MALCO REFINERIES "F" February 16, 1959

Well No. 1 is located 1980 ft. from {N/S} line and 660 ft. from {E/W} line of sec. 1

NW/4 SW/4 Section 1 (¼ Sec. and Sec. No.) 18 - S (Twp.) 27 - E (Range) NMPM (Meridian)

Undesignated (Field) Eddy (County or Subdivision) New Mexico (State or Territory)

Empire Area (Est.)

The elevation of the derrick floor above sea level is ..... ft. Furnish later.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

We propose to drill the above well with rotary tools to an approximate depth of 6200' to test the Abo. Casing program will be as follows:

Size of Hole	Size of Casing	Depth	Cement
11	8-5/8	950	Circulate 2% Gel with 100 sacks neat on btm.
7-7/8	5-1/2	6135	150

NOTE: Please insert lease number.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Pan American Petroleum Corporation

Address Post Office Box 68

Hobbs, New Mexico

By Original Signed

Title Field Superintendent

GPO 918507

FORM C-128
Revised 5-1-57

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

SECTION A

Operator	Lease	Well No.
Pan American Pet. Corp.	U.S.A. Malco Refineries F	1

Unit Letter	Section	Township	Range	County
L	1	18 S	27 E	Eddy

Actual Footage Location of Well: 1980 feet from the South line and 660 feet from the West line

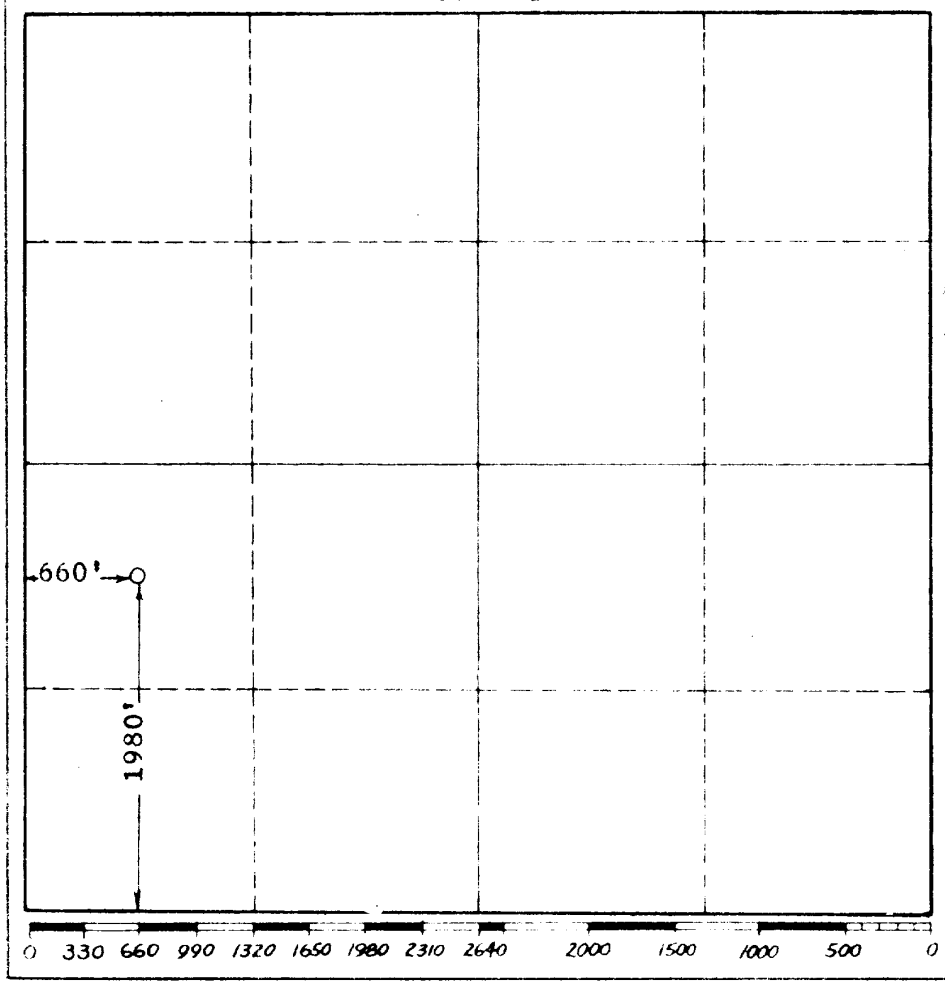
Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
Furnish later	Abo	Empire Abo	40 Acres

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES X NO _____. *("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)*
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization, agreement or otherwise? YES _____ NO _____. If answer is "yes," Type of Consolidation _____
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

RECEIVED
FEB 18 1959
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

SECTION B



CERTIFICATION

I hereby certify that the information in *SECTION A* above is true and complete to the best of my knowledge and belief.

Name: Original Signed by E. W. BROWN

Position: Field Superintendent

Company: Pan American Petroleum Corp.

Date: February 16, 1959

I hereby certify that the well location shown on the plat in *SECTION B* was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: 2-10-59

Registered Professional Engineer and/or Land Surveyor, JOHN W. WEST

John W West

Certificate No. N.M. P.E. & L.S. NO. 676

DIAL 3-3942

DIAL 3-6770

JOHN W. WEST ENGINEERING COMPANY
412 NORTH DAL PASO
HOBBS, NEW MEXICO

February 12, 1959

Pan American Pet. Corp.
Hobbs, New Mexico

Gentlemen:

On February 10, 1959, a survey was made to locate your U.S.A. Malco Refineries "F" No. 1 well at a point 1980 feet from the South line and 660 feet from the West line of Sec. 1, Township 18 South, Range 27 East, N.M.P.M., Eddy County, New Mexico.

A Flag was set at the USGLO Quarter corner marker common to Sections 1 and 2 and the the Transit was set up at the U.S. G.L.O. Section corner marker common to Sections 1, 2, 11 and 12. Thence chaining North from the Transit on the West line of Section 1 a distance of 1980 feet, thence East 660 feet to the location site of the USA Malco Refineries "F" No. 1 well. As a check on our survey we chained West from the location site 660 feet and thence North 609.5 feet to the USGLO Quarter corner marker common to sections 1 and 2, checking in within 0.6 feet of the distance as shown on the USGLO Township Plats.

I hereby certify that the foregoing survey was made in the field by me and that the same is true and correct to the best of my knowledge and belief.

Respectfully submitted,

John W West

John W. West

NE MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

(Form C-104)
Revised 7/1/57

REQUEST FOR (OIL) - ~~(GAS)~~ ALLOWABLE

New Well
~~Recompletion~~

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

Hobbs, New Mexico (Place) April 24, 1959 (Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS:

Pan American Petroleum Corp. - Malco Refineries "F" (Company or Operator) (Lease), Well No. 1, in NW ¼ SW ¼,
L (Unit Letter), Sec. 1, T. 18 S, R. 27 E, NMPM., Empire Abo Pool
Eddy County. Date Spudded 3-26-59 Date Drilling Completed 4-20-59

Please indicate location:

D	C	B	A
E	F	G	H
L X	K	J	I
M	N	O	P

Sec. 1, T-18-S, R-27-E
1980 S - 660 W

Elevation 3581 RDB Total Depth 6137 PBTD 6101

Top Oil/~~Gas~~ Pay 5460 Name of Prod. Form. Abo

PRODUCING INTERVAL -

Perforations 6040-6080 with 2 shots per foot

Open Hole - Depth Casing Shoe 6137 Depth Tubing 6077

OIL WELL TEST -

Natural Prod. Test: _____ bbls.oil, _____ bbls water in _____ hrs, _____ min. Choke Size _____

Test After Acid or ~~Fracture~~ Treatment (after recovery of volume of oil equal to volume of load oil used): 82 bbls.oil, no bbls water in 24 hrs, _____ min. Choke Size 10/64"

GAS WELL TEST -

Natural Prod. Test: _____ MCF/Day; Hours flowed _____ Choke Size _____

Method of Testing (pitot, back pressure, etc.): _____

Test After Acid or Fracture Treatment: _____ MCF/Day; Hours flowed _____

Choke Size _____ Method of Testing: _____

Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and sand): Acidized with 500 gallons 15% regular

Casing Press. PKR Tubing Press. 725 Date first new oil run to tanks 4-20-59

Oil Transporter Malco Refineries Inc.

Gas Transporter _____

Tubing, Casing and Cementing Record

Size	Feet	Sax
8-5/8	1468	750
5-1/2	6167	1000
2-3/8	6077	

Remarks: _____

I hereby certify that the information given above is true and complete to the best of my knowledge.

Approved _____, 19____

OIL CONSERVATION COMMISSION

By: M. L. Armstrong

Title _____

PAN AMERICAN PETROLEUM CORPORATION
(Company or Operator)

Original Signed by
L. W. BROWN
(Signature)

Title Field Superintendent

Send Communications regarding well to:

Name J. W. Brown

Address Box 68 - Hobbs, New Mexico

NEW M ICO OIL CONSERVATION CO MISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Pan American Petroleum Corporation Lease Malco Refineries "F"

Well No. 1 Unit Letter L S 1 T 18 S R 27 E Pool Undesignated

County Eddy Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit F S 1 T 18 S R 27 E

Authorized Transporter of Oil or Condensate Malco Refineries Inc.

Address Box 660 - Roswell, New Mexico
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas

Address
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Vented pending market arrangements.

Reasons for Filing: (Please check proper box) New Well (x)

Change in Transporter of (Check One): Oil ( ) Dry Gas ( ) C'head ( ) Condensate ( )

Change in Ownership ( ) Other ( )
(Give explanation below)

Remarks:

Completed as an oil well 4-21-59.

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 24th day of April 19 59

By Original Signed By J. W. BROWN

Approved 19

Title Field Superintendent

OIL CONSERVATION COMMISSION

Company Pan American Petroleum Corporation

By M L Armstrong

Address Box 68

Title

Hobbs, New Mexico

COPY TO O. C. C.

Form 9-330

Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Las Cruces
SERIAL NUMBER LC 062412
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company Pan American Petroleum Corp. Address Box 68 - Hobbs, New Mexico

Lessor or Tract USA Malco Refineries "F" Field Empire Abo State New Mexico

Well No. 1 Sec. 1 T. 18S R. 27E Meridian NMPM County Eddy

Location 1980 ft. [N.] of S Line and 660 ft. [E.] of W Line of Section 1 Elevation 3581 RDB (Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed Original Signed by L. W. BROWN

Date April 23, 1959 Title Field Superintendent

The summary on this page is for the condition of the well at above date.

Commenced drilling 3-26-, 19 59 Finished drilling 4-20-, 19 59

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from 6040 to 6080 No. 4, from to

No. 2, from to No. 5, from to

No. 3, from to No. 6, from to

IMPORTANT WATER SANDS

No. 1, from to No. 3, from to

No. 2, from to No. 4, from to

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
8-5/8	24	8	J-55	1468	Float				Surface
5-1/2	14	8	J-55	6367	Float		6040	6080	Oil String
							w/2 shots per foot		

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8	1470	750	HOWCO		
5-1/2	6137	1000	HOWCO		

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth set

Adapters—Material Size

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 0 feet to 6137 feet, and from feet to feet

FOLD | MARK

Rotary tools were used from Surface feet to 6137 feet, and from ..... feet to ..... feet

Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet

DATES

Completed April 21 19 59 — Put to producing April 20, 19 59

The production for the first 24 hours was 82 barrels of fluid of which 100 was oil; ..... % emulsion; ..... % water; and ..... % sediment. Gravity, °Bé. 42°

If gas well, cu. ft. per 24 hours ..... Gallons gasoline per 1,000 cu. ft. of gas .....

Rock pressure, lbs. per sq. in. .....

EMPLOYEES

B. J. Wright, Driller — R. E. Miles, Driller

J. W. Martin, Driller — W. P. Tadlock, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	387	387	Red Bed
387	600	213	Red Bed, Anhy.
600	1025	425	Anhy.
1025	1463	438	Anhy., Gyp
1463	1521	58	Anhy., Lime
1521	4809	3288	Lime
4809	4822	13	Lime and Dolomite
4822	4844	22	Dolomite
4844	4911	67	Lime
4911	5557	646	Dolomite, Lime
5557	6137	580	Lime

TOPS

San Andres	-	1830
Glorieta	-	3220
Abo Reef	-	5460

[OVER]

16—43094-4

16—43094-2 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

Well was drilled to a TD of 6137', perforated 6040'-6080' w/2 shots per foot and acidised with 500 gallons 15% regular acid. On test well flowed 82 BO, no water in 24 hrs., (85.3 MCF) gas on 10/64" choke, TPF 72# GOR 1041

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

NEW MEXICO

OIL CONSERVATION COMMISSION

Post Office Box 2045
Hobbs, New Mexico
May 26, 1959

Pan American Petroleum Corporation
P. O. Box 68
Hobbs, New Mexico

Re: Undesignated Well
Placed in Pool

Gentlemen:

In accordance with the provisions of Commission Order R-1397, your Malco Refineries "P" No. 1 oil well in Unit L of Section 1, Township 18 South, Range 27 East, which is currently listed in the "Undesignated Section" of the Proration Schedule, will appear in the Empire-Abo Pool in the _____ Schedule.

Please file Form C-110 showing the change in pool designation of this well with the Artesia office of the Oil Conservation Commission.

Yours very truly,

OIL CONSERVATION COMMISSION

R. F. Montgomery
Proration Manager

RFM:mg

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

REC

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

MAY 25 1959

Company or Operator Pan American Petroleum Corporation Lease Malco Refineries "F"

Well No. 1 Unit Letter L S 1 T 18 R 27 Pool Empire Abo

County Eddy Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit F S 1 T 18S R 27E

Authorized Transporter of Oil or Condensate Continental Pipe Line Company

Address Box 367, Artesia, New Mexico
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas _____

Address _____
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Vented pending market arrangements

Reasons for Filing: (Please check proper box) New Well ( )

Change in Transporter of (Check One): Oil ( ) Dry Gas ( ) C'head ( ) Condensate ( )

Change in Ownership ( ) Other ~~Change Transporter~~ (X)
(Give explanation below)

Remarks:

Filed to change transporter from Malco Refineries Inc. to Continental Pipe Line Company effective May 1, 1959.

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 19th day of May 19 59

Original Signed by
L. W. BROWN
By _____

Approved MAY 25 1959 19 ___

Title Area Superintendent

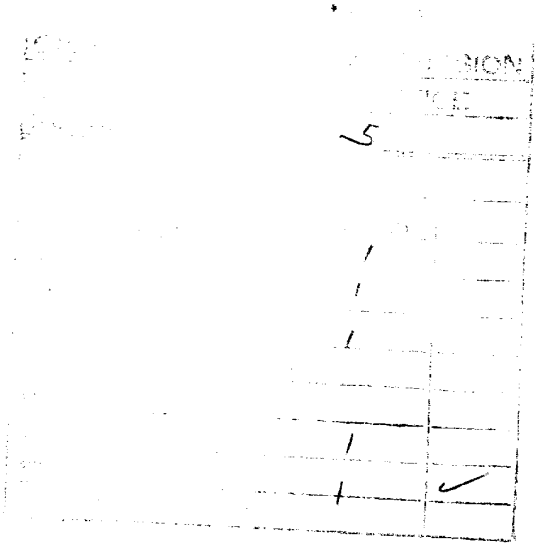
OIL CONSERVATION COMMISSION

Company Pan American Petroleum Corporation

By W. Armstrong

Address Box 68 - Hobbs, New Mexico

Title OIL AND GAS INSPECTOR



NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Pan American Petroleum Corporation Lease Malco Refineries "F"

Well No. 1 Unit Letter L S 1 T 18 R 27 Pool Empire Abo

County Eddy Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit F S 1 T 18 R 27

Authorized Transporter of Oil or Condensate Continental Pipe Line Company

Address Box 367 Artesia, New Mexico
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas _____

Address _____ Date Connected _____
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Vented pending market arrangements.

Reasons for Filing: (Please check proper box) New Well ( )

Change in Transporter of (Check One): Oil ( ) Dry Gas ( ) C'head ( ) Condensate ( )

Change in Ownership ( ) Other Change Pool Designation (X)
(Give explanation below)

Remarks:

Filed to show pool designation as Empire Abo.

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 29th day of May 19 59

Original Signed by
J. W. BROWN

By _____

Title Area Superintendent

Company Pan American Petroleum Corporation

Address Box 68

Hobbs, New Mexico

Approved JUN 8 1959 19

OIL CONSERVATION COMMISSION

By W. A. Gressett

Title OIL AND GAS INSPECTOR

OIL CONSERVATION COMMISSION		
ARTESIA DISTRICT OFFICE		
No. Copies Received	5	
Operator		
Santa Fe		
Proration Office		
State Land Office		
U. S. G.S.		
Transporter		
File		

FORM 52 2-57

PAN AMERICAN PETROLEUM CORPORATION

Post Office Box 68
Hobbs, New Mexico

April 16, 1959

File: JWM-131-986.510.1

Subject: Request for Exeption to Rule 111 Deviation Tests, USA Malco Refineries "F" No. 1, Empire Abo Field

New Mexico Oil Conservation Commission (2)
P. O. Box 871
Santa Fe, New Mexico

Attention: Mr. D. S. Nutter, Chief Engineer

Gentlemen:

This has reference to your conversation with Mr. N. S. Whitmore of Pan American on April 14, 1959, concerning the deviation test requirements of Rule 111. It is our understanding that the Commission may grant exceptions to the requirement for running a directional survey where computation of the deviation surveys periodically run in conjunction with drilling operations indicates the bottom of hole could not conceivably be off the lease.

Currently, Pan American Petroleum Corporation is drilling their joint interest USA Malco Refineries "F" No. 1 in the Empire Abo Field. This well was staked 1980 feet from the south line and 660 feet from the west line of Section 1, T-18-S, R-27-E, Eddy County, New Mexico. The projected total depth is approximately 6150 feet. At a depth of 4805 feet a deviation test registered 6-1/2° which was the first deviation recorded above 5°. Since that depth the deviation has varied between 6-1/4° and 6-1/2° with the well currently drilling at approximately 5530 feet.

The attached tabulation furnishes the deviation surveys run on the well to date along with a computation of the drift in a continuous direction. The assumption that the drift would remain in a continuous direction was made to analyze the drift under the least desirable condition to determine if the bottom of the hole were possibly approaching a lease line. That drift would be maintained in a continuous straight line is also considered very unlikely to occur under actual drilling conditions.

These data indicate the horizontal drift from the surface to 5500 feet to be approximately 270 feet. Considering the deviation would remain relatively constant for the remaining 650 feet to be drilled, the maximum anticipated horizontal drift would approach 343 feet. Thus it is indicated that deviations to total depth of the magnitude currently encountered would not place the bottom of the well [illegible] line for this 660 foot location.

It is therefore respectfully requested that Pan American Petroleum Corporation be granted an exception to Rule 111 for running a directional survey on their USA Maleo Refineries "F" No. 1. Your early consideration of this request will be sincerely appreciated as it is anticipated that drilling operations will be completed by April 18, 1959.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

J. W. Brown
Field Superintendent

By: J. W. Mack

cc: Mr. M. L. Armstrong
New Mexico Oil Conservation Commission
Artesia, New Mexico

As an director, respectfully requested that the American Petroleum Institute be granted an exemption by July 1st for running a directional survey on their gas [illegible] Nos. 1. Your early consideration of this request will be sincerely appreciated as it is anticipated that drilling operations will be completed by April 15, 1955.

Yours very truly,

[illegible] CONSULTING ENGINEERS CORPORATION

[illegible]
[illegible]

By: [illegible]

cc: Mr. L. M. Alexander
New Mexico Oil Conservation Commission
Artesia, New Mexico

DEVIATION SURVEYS
USA MALCO REFINERIES "F" NO. 1

Depth Totco Ran	Interval Between Totcos	Drift Indicated By Totco	Horizontal Drift Over Interval	Cumulative Horizontal Drift
500'	500'	3/4°	6.55'	6.55'
970'	470'	3/4°	6.15'	12.70'
1350'	380'	3/4°	4.97'	17.67'
1850'	500'	1-3/4°	15.27'	32.94'
2050'	200'	2°	6.98'	39.92'
2380'	330'	1-1/2°	8.64'	48.56'
2970'	590'	1-3/4°	18.02'	66.58'
3410'	440'	2-3/4°	21.11'	87.69'
3745'	335'	3-1/2°	20.45'	108.14'
4050'	305'	3-1/2°	18.62'	126.76'
4350'	300'	4-1/2°	23.45'	150.21'
4555'	205'	4-3/4°	16.98'	167.19'
4650'	95'	4-3/4°	7.87'	175.06'
4805'	155'	6-1/2°	17.55'	192.61'
4990'	185'	6-1/2°	20.94'	213.55'
5115'	125'	6-1/4°	13.61'	227.16'
5245'	130'	6-1/4°	14.15'	241.31'
5380'	135'	6-1/2°	15.28'	256.59'
5500'	120'	6-1/2°	13.58'	270.17'

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

COPY

April 20, 1959

Pan American Petroleum Corporation
P. O. Box 68
Hobbs, New Mexico

Attention: J. W. Brown

Re: Request for Exception to Rule 111 Deviation Tests, USA Malco Refineries "F" No. 1, Empire-Abo Pool.

Gentlemen:

Reference is made to your letter of April 16, 1959, concerning the above-captioned subject.

Inasmuch as the deviation survey which you have run establishes conclusively that the USA Malco Refineries "F" No. 1 Well will be bottomed on the lease where it is located, it is my opinion that the requirements of Rule 111 have been fully complied with.

Accordingly a hearing on this matter is unnecessary.

Very truly yours,

A. L. PORTER, Jr.,
Secretary-Director

ALP/OEP/ir

cc: Mr. M. L. Armstrong
Oil Conservation Commission
Artesia, New Mexico

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

MAY 1959

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Pan American Petroleum Corporation Lease Malco Refineries F

Well No. 1 Unit Letter L S 1 T 18 R 27 Pool Empire Abo

County Eddy Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit F S 1 T 18 R 27

Authorized Transporter of Oil or Condensate McWood Corp. (Trucks)

Address 330 Petroleum Building Abilene, Texas
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas

Address
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Vented pending market arrangements

Reasons for Filing: (Please check proper box) New Well ( )

Change in Transporter of (Check One): Oil ( ) Dry Gas ( ) C'head ( ) Condensate ( )

Change in Ownership ( ) Other Change Transporter (X)
(Give explanation below)

Remarks:

Filed to change Transporter from Continental Pipe Line Co. to McWood Corp. (Trucks)

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 29 day of May 19 59

Original Signed by
J. W. BROWN

By

Title Area Superintendent

Company PAPC

Address Box 68
Hobbs, New Mexico

Approved 19

OIL CONSERVATION COMMISSION

By M. L. Armstrong

Title

OIL CONSERVATION COMMISSION		
ARTESIA DISTRICT OFFICE		
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NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

RECEIVED
SEP 9 1959

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Pan American Petroleum Corporation Lease USA Malco Refineries F

Well No. 1 Unit Letter L S 1 T 18S R 27E Pool Empire Abo

County Eddy Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit F S 1 T 18S R 27E

Authorized Transporter of Oil or Condensate Service Pipe Line Co., Box 337, Midland, Texas

Address _____
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas Gas Vented

Address _____ Date Connected _____
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Gas Flared

Reasons for Filing: (Please check proper box) New Well ( )

Change in Transporter of (Check One): Oil (x) Dry Gas ( ) C'head ( ) Condensate ( )

Change in Ownership ( ) Other ( )
(Give explanation below)

Remarks:

Change in transporter from McWood Corporation (Trucks) to Service Pipe Line Co., effective 9-10-59

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 8 day of September 19 59

By Original Signed by J. W. BROWN

Approved SEP 10 1959 19

Title Area Superintendent

OIL CONSERVATION COMMISSION

Company Pan American Petroleum Corporation

By M. Armstrong

Address Box 68 - Hobbs, NM

Title

OIL CONSERVATION COMMISSION
ARTESIA DISTRICT OFFICE
No. Copies Received 3
D.
OR
PROD
STA
U. S. G.
ER
BUREAU OF MINES

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

RECEIVED
SEP 19 1960
O. C. C.
ARTESIA, OFFICE

(File the original and 4 copies with the appropriate district office)

NAME CHANGED:
FROM: PAN AMERICAN PETR. CORP.
TO: AMOCO PRODUCTION CO.
EFFECTIVE: 2-1-71

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Company or Operator ~~Pan American Petroleum Corporation~~ Lease ~~Maico~~ "F" Federal

Well No. 1 Unit Letter L S 1 T 18S R 27E Pool Empire Abo

County Eddy Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit F S 1 T 18S R 27E

Authorized Transporter of Oil or Condensate ~~Service Pipe Line Co.~~
Address 3411 Knoxville Avenue
Lubbock, Texas 79413
Eff. 4/1/70 name change from Service to Amoco Pipeline Co.
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas ~~Empire Abo Gasoline Plant~~
Address ~~Pan American Petr. Corp.~~, Box 68, Hobbs, N.M. Date Connected 9-3-60
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:
Effective 2-1-71
~~Gas Transporter Name Changed:~~
From: Pan American Petroleum Corp.
~~To: Amoco Production Co.~~

Reasons for Filing: (Please check proper box) New Well ( )
Change in Transporter of (Check One): Oil ( ) Dry Gas ( ) C'head (x) Condensate ( )

Change in Ownership ( ) Other ( )
Remarks: (Give explanation below)

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 14th day of September 19 60

By Original Signed by J. W. BROWN

Approved SEP 15 1960 19

Title Area Superintendent

OIL CONSERVATION COMMISSION

Company Pan American Petroleum Corporation

By M. Armstrong

Address Box 68

Title

Hobbs, New Mexico

OIL CONSERVATION COMMISSION
ARTESIA DISTRICT OFFICE
No. Copies Received 5

D

SANTA FE
MAIL OFFICE
FLORATION
STATE LAND OFFICE
U.S.G.S.
TRANSPORTER
FILE
BUREAU OF MINES

NEW MEXICO
OIL CONSERVATION COMMISSION
P. O. DRAWER DD
ARTESIA, NEW MEXICO

March, 1968

No. A 1

SUPPLEMENT TO THE OIL PRORATION SCHEDULE

DATE 3/1/68

PURPOSE: ALLOWABLE ASSIGNMENT (BACK ALLOWABLE)

Effective 3/1/68, back allowable is hereby assigned to the following Pan American Pet. Corp. wells in the Empire Abo Pool in accordance with Commission Order No. A-220.

Malco F Lease

#1-L, 1-18-27, 18 bbls total
#2-E, " , 18 bbls total
#3-M, " , 18 bbls total
#4-F, " , 15 bbls total
#5-K, " , 16 bbls total
#6-B, " , 18 bbls total
#7-G, " , 18 bbls total
#8-C, " , 18 bbls total
#9-H, " , 16 bbls total
#11-A, " , 18 bbls total
#12-M, " , 18 bbls total

Malco R Lease

#10-D, 1-18-27, 18 bbls total

NAME CHANGED:
FROM: PAN AMERICAN PETR. CORP.
TO: AMOCO PRODUCTION CO.
EFFECTIVE: 2-1-71

WAG/jw

Pan Am. Petr. Corp.

Service
Amoco 4-1-70

OIL CONSERVATION COMMISSION

SUPERVISOR, DISTRICT NO. 2

EXTRA COPY

Copy to D.O. NM055 7371

Form 9-331
(May 1963)

RECEIVED
MAY 15 1972
ARTESIA, OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.
~~LC 062412~~

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

1. OIL WELL [X] GAS WELL [ ] OTHER

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
Amoco Production Company

8. FARM OR LEASE NAME
MALCO "F" Federal

3. ADDRESS OF OPERATOR
BOX 68, HOBBS, N. M. 88240

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1980' FSL x 660' FWL Sec 1 (Unit L, NW/4 SW/4)

10. FIELD AND POOL, OR WILDCAT
EMPIRE ABO

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
1-18-27 NMPM

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3581' R.D.B.

12. COUNTY OR PARISH
EDDY

13. STATE
NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[X]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			
(Other)							

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

In an effort to increase productivity propose to acidize perforations 6040'-6080' w/ 2500 gal 15% NE. Evaluate and restore to production.

Latest flow test 4-20-72, 102 BO + 0 BW 24 hrs. GOR 961.

TD 6137'
PBD 6101'
5½" CSA 6137' - Cmt Circ.
PERFS: 6040'-80' w/2 JSPF.

18. I hereby certify that the foregoing is true and correct

SIGNED _____ TITLE AREA SUPERINTENDENT DATE MAY 8 1972

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
MAY 12 1972
R. L. BEEKMAN
ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

OL 4- USGS-Art
1- Div
1- SUSP
1- RRY
1- HONDO

N. M. O. C. C. COPY

copy to D.J.

Form 9-331
(May 1963)

RECEIVED
MAY 24 1972
O. C. C.
ARTESIA, OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
NM-0557371

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

7. UNIT AGREEMENT NAME

1. OIL WELL ☒ GAS WELL ☐ OTHER

2. NAME OF OPERATOR
Amoco Production Company

8. FARM OR LEASE NAME
MALCO "F" Federal

3. ADDRESS OF OPERATOR
BOX 68, HOBBS, N. M. 88240

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1980' FSL x 660' FWL Sec 1 (Unit L, NW/4 SW/4)

10. FIELD AND POOL, OR WILDCAT
Empire Abo

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
1-18-27 NMPM

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3581' R.D.B.

12. COUNTY OR PARISH
EDDY

13. STATE
NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☒	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Perforations 6040-80' were acidized w/ 2500 gal 15% NE acid. Evaluated & restored to prod.

Prior - Flw 102 BO + 0 BW 24 hrs. GOR 961
after - Flw 152 BO + 0 " " " GOR 691

RECEIVED
MAY 19 1972
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED _____ TITLE AREA SUPERINTENDENT DATE MAY 17 1972

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
MAY 25 1972
R. L. BEEKMAN
ACTING DISTRICT ENGINEER

0+4-USGS-Art
1-Div
1-Susp
1-Hondu

*See Instructions on Reverse Side

5

SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
OPERATOR		
PRORATION OFFICE		

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

RECEIVED
SEP 26 1973
O. C. C.
ARTESIA, OFFICE

I. Operator: Atlantic Richfield Company

Address: P. O. Box 1710, Hobbs, New Mexico 88240

Reason(s) for filing (Check proper box)
- New Well [ ]
- Recompletion [ ]
- Change in Ownership [X]

Change in Transporter of:
- Oil [ ]
- Dry Gas [ ]
- Casinghead Gas [ ]
- Condensate [ ]

Other (Please explain): Included in Empire Abo Unit eff: 10-1-73. Change in lease name from MALCO F Federal #1.

If change of ownership give name and address of previous owner: AMOCO Production Company P. O. Box 68, Hobbs, New Mexico

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease (State, Federal or Fee)	Lease No.
Empire Abo Unit K	17	Empire Abo	Federal	

Location: Unit Letter L; 1980 Feet From The South Line and 660 Feet From The West

Line of Section 1, Township 18S, Range 27E, NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [X] or Condensate [ ]: AMOCO Pipe Line Company
Address (Give address to which approved copy of this form is to be sent): 2300 Continental Bk.Bldg.,Ft. Worth,Tex. 76102

Name of Authorized Transporter of Casinghead Gas [X] or Dry Gas [ ]: AMOCO Production Company
Address (Give address to which approved copy of this form is to be sent): P. O. Box 68, Hobbs, New Mexico 88240

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	F	1	18S	27E	yes	9-3-60

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Resv.	Diff. Resv.

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
Perforations			Depth Casing Shoe

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pitot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION COMMISSION

APPROVED SEP 28 1973, 19____

BY W. A. Gressett

TITLE OIL AND GAS INSPECTOR

R. L. Stockelfleth
(Signature)

Sr. Acctg. Clerk
(Title)

9-26-73
(Date)

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepene well, this form must be accompanied by a tabulation of the deviati tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allo able on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owne well name or number, or transporter, or other such change of conditi

Separate Forms C-104 must be filed for each pool in multip completed wells.

DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

RECEIVED

NOV - 6 1978

O. C. C.
ARTESIA, OFFICE

Supersedes Old C-102 and C-103 Effective 1-1-65

5a. Indicate Type of Lease: State [ ] Fed [X]

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Unit Agreement Name: Empire Abo Unit

1. OIL WELL [X] GAS WELL [ ] OTHER-

8. Farm or Lease Name: EAU "K"

2. Name of Operator: Atlantic Richfield Company

9. Well No.: 17

3. Address of Operator: P. O. Box 129 Artesia, New Mexico 88210

10. Field and Pool, or Wildcat: Empire Abo

4. Location of Well: UNIT LETTER L, 1980 FEET FROM THE South LINE AND 660 FEET FROM THE West LINE, SECTION 1 TOWNSHIP 18S RANGE 27E NMPM.

15. Elevation (Show whether DF, RT, GR, etc.): KB 3581'

12. County: Eddy

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]	CHANGE PLANS	[ ]	COMMENCE DRILLING OPNS.	[ ]	PLUG AND ABANDONMENT	[ ]
PULL OR ALTER CASING	[ ]			CASING TEST AND CEMENT JOB	[ ]		
OTHER	[ ]			OTHER Piping braden head to surface.			[ ]

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Piping braden head to surface.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED N. H. Truitt TITLE Dist. Prod. Supervisor DATE 10-31-78

APPROVED BY B W Weaver TITLE Field Rep DATE 11-8-78

CONDITIONS OF APPROVAL, IF ANY:

DISTRIBUTION		6
SANTA FE		1
FILE		1 ✓
U.S.G.S.		
LAND OFFICE		
TRANSPORTER	OIL	1
	GAS	2
OPERATOR		1
PRORATION OFFICE		

NEW MEXICO OIL CONSERVATION COMMISSION

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

RECEIVED
MAR 14 1979
O. C. C.
ARTESIA, OFFICE

I.

Operator: ARCO Oil and Gas Company - Division of Atlantic Richfield Company

Address: P. O. Box 1710, Hobbs, New Mexico 88240

Reason(s) for filing *(Check proper box)*: New Well ☐ Recompletion ☐ Change in Ownership ☐ Change in Transporter of: Oil ☐ Dry Gas ☐ Casinghead Gas ☐ Condensate ☐

Other *(Please explain)*: Change in Operator Name effective: 4-1-79

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease: State, Federal or Fee
Empire Abo Unit "K"	17	Empire Abo	Federal

Location: Unit Letter L ; 1980 Feet From The South Line and 660 Feet From The West

Line of Section 1, Township 18S Range 27E, NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [X] or Condensate [ ]: Amoco Pipeline Company
Address *(Give address to which approved copy of this form is to be sent)*: 2300 Continental National Bank Bldg. Ft. Worth, Texas 76102

Name of Authorized Transporter of Casinghead Gas [X] or Dry Gas [ ]: Amoco Production Company, Phillips Petroleum Company
Address *(Give address to which approved copy of this form is to be sent)*: P.O. Drawer A, Levelland, Texas 79336; 4001 Penbrook, Odessa, Texas 79760

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	F	1	18	27	yes	AMO & PP 9-3-60

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
No Change			
Pool	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
Perforations			**Depth Casing Shoe**

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method *(Flow, pump, gas lift, etc.)*	
No Change			
Length of Test	**Tubing Pressure**	**Casing Pressure**	**Choke Size**
Actual Prod. During Test	**Oil-Bbls.**	**Water-Bbls.**	**Gas-MCF**

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method *(pitot, back pr.)*	**Tubing Pressure**	**Casing Pressure**	**Choke Size**

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION COMMISSION

APPROVED APR 09 1979, 19 _____

BY W. A. Gressett

George H. Rooks
(Signature)

District Prod & Drlg Supt.
(Title)

3-7-79
(Date)

TITLE SUPERVISOR, DISTRICT II

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out Sections I, II, III, and VI only for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply

C/St
LT
SI CP

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-104
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

Operator name and Address	OGRID Number
ARCO Permian A Unit of Atlantic Richfield Co. P.O. Box 1710 Hobbs, NM 88240	000990
	Reason for Filing Code: JUN 1 1994 CH

API Number	Pool Name	Pool Code
30 - 0 15-00703	Empire ABO	22040
Property Code	**Property Name**	**Well Number**
001474	Empire ABO Unit "K"	17

II. Surface Location

Ul or lot no.	Section	Township	Range	Lot.Idn	Feet from the	North/South Line	Feet from the	East/West line	County
L	1	18S	27E		1980	S	660	W	Eddy

Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County

Lse Code	Producing Method Code	Gas Connection Date	C-129 Permit Number	C-129 Effective Date	C-129 Expiration Date
F	F				

III. Oil and Gas Transporters

Transporter OGRID	Transporter Name and Address	POD	O/G	POD ULSTR Location and Description
000734	AMOCO Pipeline 502 NW Avenue Levelland, TX 79336	2811057	O	D-10 F-18S-27E
000756	AMOCO Production Co. P.O. Box 68 Hobbs, NM 88240	2811047	G	F-1-18S-27E
009171	GPM Gas Corp. 4001 Penbrook Odessa, TX 79760	2811047	G	"

IV. Produced Water

POD	POD ULSTR Location and Description

V. Well Completion Data

Spud Date	Ready Date	TD	PBTD	Perforations

Hole Size	Casing & Tubing Size	Depth Set	Sacks Cement

VI. Well Test Data

Date New Oil	Gas Delivery Date	Test Date	Test Length	Tbg. Pressure	Csg. Pressure

Choke Size	Oil	Water	Gas	AOF	Test Method

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION DIVISION

Signature: Kellie D. Murrish	Approved by: SUPERVISOR, DISTRICT II
Printed name: Kellie D. Murrish	Title:
Title: Records CLerk II	Approval Date: JUN 6 1994
Date: 6-1-94 Phone: 505-391-1649	

* If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature	Printed Name	Title	Date

NM OIL CONS COMMISSION
Drawer DD
Artesia, NM 88210

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
LC-062412 NM 055937

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
EMPIRE ABO UNIT"K" # 17

2. Name of Operator
ARCO Permian

9. API Well No.
30-015-00703

3. Address and Telephone No.
P.O.BOX 1610,MIDLAND, TX 79702 915 688-5672

10. Field and Pool, or exploratory Area
EMPIRE ABO

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980 FSL & 660 FWL(UNIT LETTER L)
1-18S-27E

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
	[ ] Recompletion	[ ] New Construction
[ ] Subsequent Report	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
[ ] Final Abandonment Notice	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other ADD HORIZONTAL EXT	[ ] Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

PROPOSE TO ADD HORIZONTAL DRAINHOLE AS FOLLOWS:
1. POH W/PROD CA.
2. SET RETRIEVABLE WHIPSTOCK.
3. SIDETRACK & DRILL 250' RADIUS CURVE.
4. DRILL 1000' HORIZONTAL LATERAL.
5. RETRIEVE WHIPSTOCK.
6. RIH W/PROD CA.

RECEIVED
MAY - 9 1995
OIL CON. DIV.
DIST. 2

MAY 01 1995
Roswell, New Mexico

Subject to
Like Approval
by State OCD

14. I hereby certify that the foregoing is true and correct
Signed Ken W Gosnell Title AGENT Date 05-03-95

(This space for Federal or State office use)
Approved by (ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 5/5/95
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

HORIZONTAL SIDETRACK PROCEDURE

DATE: May 1, 1995

WELL: **Empire Abo #K-17** **DRILLED:** 1959 **FIELD:** Empire Abo **COUNTY:** Eddy, NM

BY: P.N. Drennon **TD:** 6,137' **PBD:** 6,101' **DATUM:** 12' KB

CASING:	SIZE	WEIGHT	GRADE	SET @	SX CMT	TOC
SURFACE:	8 5/8"	24#	J-55	1,470'	750	surf-circ
PROD:	5 1/2"	14#	J-55	6,137'	1,000	surf-circ

PERFORATIONS: Open perfs: Abo 6,040'-6,080'

HISTORY AND BACKGROUND: Drilled in 1959, completed as a flowing oil well from the Abo.

SCOPE OF WORK: Set retrievable whipstock, sidetrack and drill 250' radius build curve, 1,000' horizontal lateral, retrieve whipstock, complete as flowing/pumping well from existing Abo perfs and new horizontal lateral.

TARGET INFORMATION:		
	Whipstock Depth:	5,810'
	Kickoff Point:	Same as above
	Azimuth:	E (90º)
	Target Depth:	6,060'
	Planned Displacement:	Total 1,250'
	Surface Lacation:	1,980' FSL, 660' FWL, Sec. 1, T-18-S, R-27-E, Eddy Co., N.M.

PROCEDURE

1. MIRU PU, pump, swivel, pits. Install H_2S safety equipment. Pull rods and pump, warehouse same. ND tree, NU BOPE. Pull tubing, LD and warehouse.

2. PU 4 3/4" bit and scraper, 10 3-½" DC, 2 7/8" AOH DP, TIH to PBTD 6,101, circulate @ TD if necessary. RU & run gyro multi-shot survey via DP. RD survey equipment, TOOH, LD bit and scraper.

3. GIH w/ packer and set in vicinity of 5,800'.

4. Test casing and stack to 750 psig.

5. PU anchor, whipstock assembly w/ starter mill, BHA, TIH, hydraulically set anchor @ 5,810'.

Note: Oriented assembly, azimuth E (compass 90º) per O/A Engineer (Gary Smallwood).

6. Shear off whipstock assembly w/ starter mill. Mill out casing and shear bolt assembly to start window, use Abo produced water for circulation. Use polymer additions for additional lift if necessary.

7. TOOH, LD starter mill, PU window mill, 1 jt S-135 AOH DP, BHA, TIH.

8. Finish cutting window, drill out into open hole, circulate clean.

9. TOOH, LD window mill and inspect for proper wear. PU window mill, watermelon mill, BHA.

Note: Air/foam package to be on location at this point.

10. TIH, clean and dress window, drill 8-10' formation, circulate clean.

11. TOOH, LD window and watermelon mills, check for proper wear. PU 4 ¾" drag bit, bent housing motor, bent sub, non-mag DC, 2 7/8" 8.7# PH-6 tbg DC's (minimum 2 DC's in casing @ TD of build curve), TIH.

12. Displace hole w/ stiff foam (expect 700-800 SCF/min w/ 1.75 BPM water w/ 8-10 gal/1000 foamer).

13. RU wet connect, steering tool, land same, drill build curve, plan to drill 23º/100' build rate (radius 250') to max angle of 87º- 90º- from vertical.

14. RD steering tool/wet connect, TOOH, LD build motor, PU packer on DP, TIH, set packer @ ±5,700'.

15. Open by-pass, jet via DP to kick-off and test production from build curve. If necessary, polymer squeeze build curve to shut off excess gas production.

16. TOOH, LD packer, PU 4 ¾" bit, hold motor, Monel DC, 2 7/8" tbg. DC's (minimum 9 DC's in casing @ TD), DP, TIH, RU wet connect, steering tool, land same drill lateral ±1,000' due East. All drilling done w/ stiff foam.

17. TOOH, LD BHA, PU tbg to go to end of lateral, DP, TIH.

18, Stage in and blow hole w/ air to unload foam, @ EOC blow hole dry, load to kill w/ produced water, TOOH.

19. PU CA and production tubing, TIH.

20. Swab to KO well, test.

21. Kill well w/ produced water, TOOH w/ CA.

22. PU die collar, 4 3 1/2" DC, tubing, TIH, latch and release packer stock, TOOH, LD packer stock, die collar, DC's.

23. TIH w/ CA and production tubing.

24. Swab to KO well, test.

25. If recommended, TIH to EOL w/ 1 1/4" coil tubing, spot 15% HCl w/ adds throughout lateral, POOH w/ coil tubing.

26. Swab to KO well, test.

27. TOPS

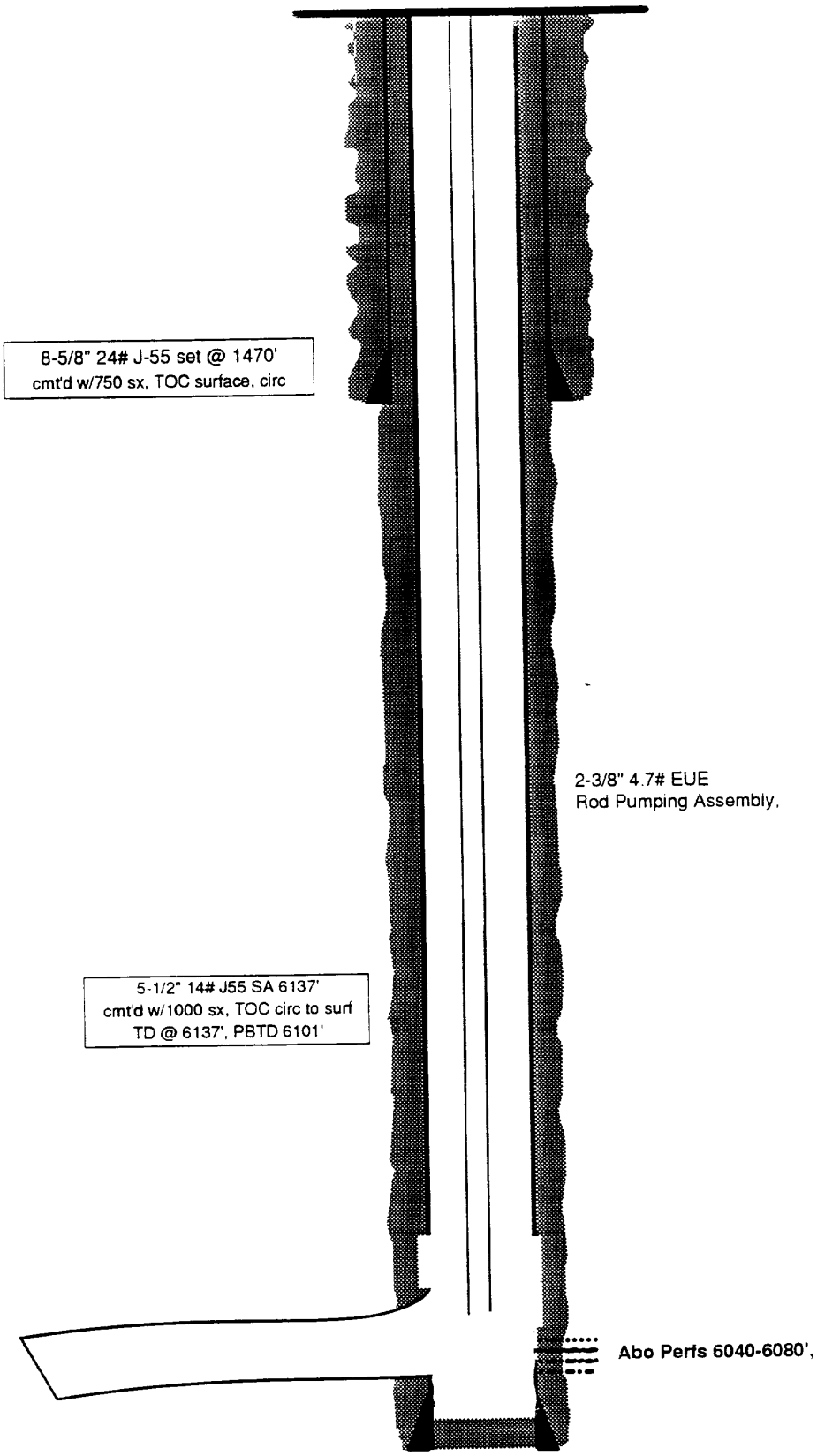
P. N. Drennon

J. E. Shields

EMPIRE ABO K-17

Proposed Status

Drilled 1959



OIL CONS COMMISSION

Drawer DD
Artesia, NM 88210

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
LC-062412

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
8910138010

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
EMPIRE ABO UNIT K-17

2. Name of Operator
ARCO Permian

9. API Well No
30-015-00703

3. Address and Telephone No.
P.O. Box 1710 Hobbs, N.M. 88240 505-391-1649

10. Field and Pool, or exploratory Area
EMPIRE ABO

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & 660' FWL, Unit Letter L
Sec. 1, T18S, R27E

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
	[ ] Recompletion	[ ] New Construction
[X] Subsequent Report	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
[ ] Final Abandonment Notice	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other ACIDIZE HORIZONTAL	[ ] Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

TD: 6137' PBD: 6101' PERFS: 6040-6080' CIBP ABOVE PERFS @ 5823'. WHIPSTOCK @ 5782'.
TOP OF WINDOWS @ 5797', BOTTOM OF WINDOW @ 5803'. hORIZONTAL 5800-7705'

06/21/95: ACIDIZE HORIZONTAL EXTENTION 5800-7705 W/2500 GALS 15% NEFE ACID AND 2500 GALS CONDENSATE. DISPLACED ACID/CONDENSATE WHILE MOVING C.T. ALONG HORIZONTAL. FLUSH W/20 BPW.

RECEIVED
SEP 12 1995
OIL CON. DIV.
DIST. 2

ACCEPTED FOR RECORD
J Lara
8 1995
CARLSBAD, NEW MEXICO

AUG 18 10 58 AM '95
RECEIVED

14. I hereby certify that the foregoing is true and correct
Signed Renee D. Murrish Title Administrative Assistant Date 08/15/95

(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

SPECIFIC INSTRUCTIONS

Item 4 - If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE - The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operation, on a Federal or Indian lease.

ROUTINE USES:

(1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.

(2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).

(3) Analyze future applications to drill or modify operations in light of data obtained and methods used.

(4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION - Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that:

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory only for the specific types of activities specified in 43 CFR Part 3160.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

C195

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
~~LC-062412~~ NM-0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
EMPIRE ABO UNIT"K" 17

2. Name of Operator
ARCO Permian

9. API Well No.
30-015-00703

3. Address and Telephone No.
P.O.BOX 1610,MIDLAND, TX 79702 915 688-5672

10. Field and Pool, or exploratory Area
EMPIRE ABO

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980 FSL & 660 FWL(UNIT LETTER L)
1-18S-27E

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other ADD HORIZONTAL EXT	[ ] Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

05-22-95. RUPU. POH W/PROD CA. RIH W/4 3/4 BIT TO 6099 PBD. SET CIBP AT 5830. RIH W/WHIPSTOCK. RAN GYRO SURVEY F/SURF-5798. SET WHIPSTOCK PKR ASSEMBLY AT 5812. CUT 6' WINDOW IN 5 1/2 CSG(5797-5803). DIRECTIONAL DRILLED TO 7705 MD. ACIDIZED W/1700 GALS. RIH W/PROD CA:2 3/8 TBG & PKR TO 5906. PKR SET AT 5772. RDPU 06-13-95.

RECEIVED
DEC 18 1995
OIL CON. DIV.
DIST. 2

ACCEPTED FOR RECORD
DEC 4

14. I hereby certify that the foregoing is true and correct
Signed Ken W Gosnell Title AGENT Date 11-16-95

(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

========= EAGLE DIRECTIONAL SERVICES, INC =========

Date: 6/8/1995 Time: 7:28: 6 PAGE: 1

Filename: "ARCO.SRV" Description: "ARCO PERMIAN EMPIRE ABO UNIT K17 RE-ENTRY HORIZONTAL WELL NW/4 SW/4 SEC 1 T18S R27E EDDY COUNTY, NEW MEXICO"

Target Coordinates: 23.6 N 1064.3 E Target TVD: 6048.600

Using Minimum Curvature Method.

S #	MEASURED DEPTH (feet)	DRIFT ANGLE (deg)	DRIFT DIRECTION (deg)	COURSE LENGTH (feet)	TRUE VERTCAL DEPTH (feet)	VERTCAL SECTION (feet)	RECTANGULAR COORDINATES (feet)		DOGLEG SEVERITY DG/100FT
0	5700.0	5.15	346.670	0.0	5689.8	0.0	210.9 N	168.9 W	0.00
1	5798.0	4.73	350.130	98.0	5787.5	-165.7	219.2 N	170.6 W	0.53
2	5828.0	8.60	48.200	30.0	5817.3	-164.2	221.9 N	169.1 W	24.31
3	5857.0	17.10	64.500	29.0	5845.6	-158.6	225.2 N	163.7 W	31.59
4	5887.0	23.60	76.700	30.0	5873.7	-148.7	228.5 N	153.8 W	25.77
5	5918.0	27.90	93.300	31.0	5901.6	-135.4	229.5 N	140.5 W	26.96
6	5948.0	33.70	97.900	30.0	5927.4	-120.2	228.0 N	125.3 W	20.85
7	5979.0	42.70	97.000	31.0	5951.7	-101.2	225.5 N	106.3 W	29.09
8	6011.0	51.40	95.200	32.0	5973.5	-78.0	223.0 N	83.0 W	27.50
9	6043.0	59.60	96.100	32.0	5991.6	-51.9	220.4 N	56.8 W	25.73
10	6074.0	58.70	97.300	31.0	6007.5	-25.5	217.3 N	30.3 W	4.41
11	6106.0	64.20	100.300	32.0	6022.8	2.1	213.0 N	2.6 W	19.06
12	6136.0	69.40	105.500	30.0	6034.6	28.8	206.8 N	24.3 E	23.54
13	6167.0	76.70	106.200	31.0	6043.7	57.2	198.7 N	52.8 E	23.65
14	6198.0	84.00	104.500	31.0	6048.9	86.4	190.7 N	82.2 E	24.16
15	6230.0	87.00	103.700	32.0	6051.4	117.2	182.9 N	113.2 E	9.70
16	6262.0	87.70	103.200	32.0	6052.8	148.1	175.5 N	144.2 E	2.69
17	6293.0	87.80	103.700	31.0	6054.1	178.1	168.2 N	174.4 E	1.64
18	6323.0	88.10	104.700	30.0	6055.1	207.0	160.9 N	203.4 E	3.48
19	6355.0	87.80	105.200	32.0	6056.3	237.7	152.6 N	234.3 E	1.82
20	6387.0	86.10	103.100	32.0	6058.0	268.5	144.8 N	265.3 E	8.44
21	6418.0	86.00	103.200	31.0	6060.1	298.4	137.8 N	295.4 E	0.46
22	6450.0	85.70	103.200	32.0	6062.4	329.3	130.5 N	326.5 E	0.94
23	6481.0	85.70	103.300	31.0	6064.8	359.2	123.4 N	356.6 E	0.32
24	6512.0	87.20	101.700	31.0	6066.7	389.3	116.7 N	386.8 E	7.07
25	6544.0	87.00	101.000	32.0	6068.3	420.5	110.4 N	418.1 E	2.27
26	6574.0	86.50	100.800	30.0	6070.0	449.8	104.8 N	447.5 E	1.79
27	6604.0	86.50	100.900	30.0	6071.8	479.0	99.1 N	477.0 E	0.33
28	6636.0	88.00	99.300	32.0	6073.4	510.4	93.5 N	508.4 E	6.85
29	6666.0	87.70	99.000	30.0	6074.5	539.9	88.8 N	538.0 E	1.41
30	6697.0	87.40	99.200	31.0	6075.8	570.3	83.9 N	568.6 E	1.16
31	6758.0	88.10	99.400	61.0	6078.2	630.2	74.0 N	628.7 E	1.19
32	6819.0	88.10	100.200	61.0	6080.2	690.1	63.6 N	688.8 E	1.31
33	6848.0	87.90	100.300	29.0	6081.2	718.5	58.5 N	717.3 E	0.77
34	6909.0	88.80	98.400	61.0	6083.0	778.4	48.6 N	777.5 E	3.45
35	6939.0	88.50	98.500	30.0	6083.7	808.0	44.2 N	807.2 E	1.05

S #	MEASURED DEPTH (feet)	DRIFT ANGLE (deg)	DRIFT DIRECTION (deg)	COURSE LENGTH (feet)	TRUE VERTCAL DEPTH (feet)	VERTCAL SECTION (feet)	--- RECTANGULAR COORDINATES (feet)		DOGLEG -SEVERITY DG/100FT
36	7001.0	89.60	98.300	62.0	6084.7	869.1	35.1 N	868.5 E	1.80
37	7062.0	86.60	95.700	61.0	6086.8	929.4	27.7 N	929.0 E	6.51
38	7152.0	89.80	96.500	90.0	6089.6	1018.6	18.1 N	1018.4 E	3.66
39	7214.0	91.30	96.300	62.0	6089.0	1080.0	11.2 N	1080.0 E	2.44
40	7276.0	92.40	96.100	62.0	6087.0	1141.5	4.5 N	1141.6 E	1.80
41	7336.0	92.60	96.500	60.0	6084.4	1200.9	2.1 S	1201.2 E	0.74
42	7362.0	92.90	96.400	26.0	6083.1	1226.6	5.0 S	1227.0 E	1.22
43	7427.0	92.20	97.100	65.0	6080.2	1290.9	12.6 S	1291.5 E	1.52
44	7458.0	90.00	97.600	31.0	6079.6	1321.6	16.6 S	1322.3 E	7.28
45	7520.0	88.30	97.700	62.0	6080.6	1382.8	24.8 S	1383.7 E	2.75
46	7583.0	87.10	98.100	63.0	6083.1	1444.9	33.5 S	1446.0 E	2.01
47	7641.0	86.40	98.500	58.0	6086.4	1502.0	41.8 S	1503.3 E	1.39
48	7672.0	85.80	98.900	31.0	6088.5	1532.5	46.5 S	1533.9 E	2.32
--- Survey #49 is Projected to TD!									
49	7705.0	85.20	98.900	33.0	6091.1	1564.9	51.6 S	1566.4 E	1.82

--- Final Closure Direction: 91.887
--- Final Closure Distance: 1567.266 feet

SCIENTIFIC DRILLING INTERNATIONAL
MIDLAND, TEXAS

Finder Survey
for

ARCO OIL & GAS COMPANY
MIDLAND, TEXAS

Job Number	: 32F0595215
Well Number	: EMPIRE ABO "K" NO. 17
Site Location	: EDDY COUNTY, NEW MEXICO
Latitude	: 32.750
Survey Date(s)	: 24-MAY-95
S.D.C. personnel	: GARY DESPAIN
Calculation Method	: Minimum Curvature
Survey Depth Zero	: RKB
Proposal Direction	: 99.000
Depth Unit	: Feet

Comments :

Inrun Survey
ARCO OIL & GAS COMPANY

Well number : EMPIRE ABO "K" NO.

Date : 24-MAY-95

Measured Depth	Vertical Depth	Vert. Section	Inc Deg	Azimuth Deg	Coordinates Latitude	Coordinates Departure	D-leg /100ft
0.0	0.00	0.0	0.00	0.00	0.00	0.00	0.00
100.0	100.00	-0.1	0.26	336.94	0.21	-0.09	0.26
200.0	200.00	-0.3	0.24	338.11	0.61	-0.26	0.02
300.0	300.00	-0.6	0.31	329.92	1.04	-0.47	0.08
400.0	400.00	-1.1	0.41	315.24	1.53	-0.86	0.14
500.0	499.99	-1.7	0.48	316.06	2.08	-1.40	0.07
600.0	599.99	-2.5	0.60	308.21	2.71	-2.10	0.14
700.0	699.98	-3.6	0.77	290.57	3.27	-3.14	0.27
800.0	799.97	-5.1	1.00	281.40	3.68	-4.63	0.27
900.0	899.94	-7.3	1.47	287.75	4.24	-6.70	0.49
1000.0	999.90	-10.0	1.75	293.11	5.23	-9.33	0.32
1100.0	1099.86	-12.9	1.76	300.33	6.61	-12.06	0.22
1200.0	1199.81	-15.8	1.82	301.42	8.21	-14.74	0.07
1300.0	1299.76	-18.7	1.84	305.46	9.97	-17.40	0.13
1400.0	1399.71	-21.6	1.85	307.40	11.88	-19.99	0.06
1500.0	1499.65	-24.4	1.86	309.17	13.89	-22.53	0.06
1600.0	1599.60	-27.2	1.84	309.49	15.93	-25.03	0.02
1700.0	1699.55	-30.0	1.85	306.69	17.92	-27.56	0.09
1800.0	1799.50	-32.9	1.90	305.11	19.84	-30.21	0.07
1900.0	1899.44	-35.9	1.84	298.32	21.55	-32.98	0.23
2000.0	1999.39	-39.0	1.80	295.41	22.99	-35.82	0.10
2100.0	2099.34	-42.0	1.76	292.14	24.24	-38.66	0.11
2200.0	2199.30	-44.9	1.63	289.34	25.29	-41.42	0.15
2300.0	2299.26	-47.7	1.61	285.57	26.14	-44.12	0.11
2400.0	2399.22	-50.5	1.65	289.24	26.99	-46.83	0.11
2500.0	2499.18	-53.4	1.77	292.86	28.06	-49.61	0.16
2600.0	2599.13	-56.4	1.81	295.13	29.33	-52.46	0.08
2700.0	2699.07	-59.5	1.92	297.43	30.78	-55.38	0.13
2800.0	2799.02	-62.7	1.98	298.76	32.38	-58.38	0.07
2900.0	2898.95	-66.0	2.09	300.78	34.14	-61.46	0.13
3000.0	2998.88	-69.5	2.18	304.51	36.15	-64.60	0.17
3100.0	3098.81	-72.9	2.29	307.13	38.44	-67.76	0.15
3200.0	3198.72	-76.5	2.41	308.70	40.96	-70.99	0.14
3300.0	3298.63	-80.3	2.56	310.17	43.71	-74.34	0.16
3400.0	3398.52	-84.2	2.67	310.66	46.67	-77.81	0.11
3500.0	3498.41	-88.3	2.92	310.46	49.84	-81.52	0.25
3600.0	3598.27	-92.8	3.09	311.16	53.27	-85.48	0.17
3700.0	3698.12	-97.4	3.19	310.20	56.84	-89.64	0.11
3800.0	3797.95	-102.2	3.37	313.04	60.64	-93.91	0.24

Inrun Survey
ARCO OIL & GAS COMPANY

Well number : EMPIRE ABO "K" NO. Date : 24-MAY-95

Measured Depth	Vertical Depth	Vert. Section	Inc Deg	Azimuth Deg	Coordinates Latitude (North)	Coordinates Departure (West)	D-leg /100ft
3900.0	3897.77	-107.2	3.50	313.09	64.73	-98.29	0.13
4000.0	3997.58	-112.4	3.68	312.42	68.98	-102.89	0.18
4100.0	4097.36	-117.9	3.94	312.80	73.48	-107.78	0.26
4200.0	4197.11	-123.8	4.17	313.98	78.34	-112.91	0.24
4300.0	4296.82	-129.9	4.48	316.34	83.69	-118.23	0.36
4400.0	4396.50	-136.1	4.72	319.48	89.64	-123.60	0.35
4500.0	4496.15	-142.2	4.80	324.09	96.16	-128.72	0.39
4600.0	4595.77	-148.1	5.19	327.23	103.35	-133.62	0.48
4700.0	4695.33	-154.1	5.63	332.27	111.50	-138.35	0.65
4800.0	4794.80	-159.9	6.14	336.90	120.76	-142.74	0.70
4900.0	4894.21	-165.7	6.29	336.37	130.69	-147.03	0.16
5000.0	4993.62	-171.3	6.22	339.19	140.78	-151.15	0.32
5100.0	5093.05	-176.4	6.04	341.67	150.84	-154.73	0.32
5200.0	5192.48	-181.1	6.11	343.75	160.94	-157.87	0.23
5300.0	5291.91	-185.6	6.21	345.12	171.28	-160.75	0.18
5400.0	5391.34	-189.5	5.96	348.94	181.60	-163.14	0.48
5500.0	5490.80	-192.9	5.88	351.26	191.84	-164.92	0.24
5600.0	5590.29	-196.3	5.64	347.36	201.78	-166.79	0.52
5700.0	5689.84	-199.8	5.15	346.67	210.95	-168.90	0.49
5798.0	5787.48	-202.8	4.73	350.13	219.21	-170.61	0.53

At Bottom Hole Location: Measured Depth = 5798.0 Horiz. Displ. = 277.775 Closure Dir. = 322.107

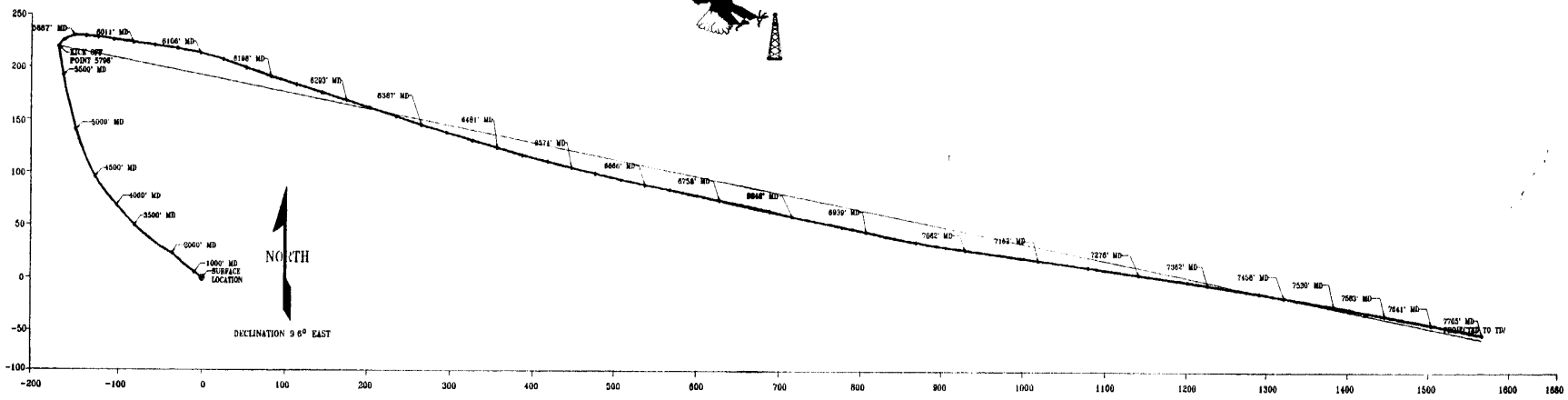
ARCO PERMIAN
EMPIRE ABO UNIT
WELL #K17 RE ENTRY
NW/4 SW/4 SECTION 1 TOWNSHIP 18 SOUTH RANGE 27 EAST
EDDY COUNTY, NEW MEXICO

SCALE 1"=150' PROPOSAL DRAWN @ 99° AZIMUTH FROM KICK OFF POINT

ARCO REP: MR. DOYLE CATES
EAGLE REPS: MIKE PELLESSIER
ROB PORTER
VOGEL REPS: KENNY GEORGE
BOBBY KLEPPER

SIERRA ENGINEERING: MR. PAT DRENNON
MR. C. D. KEMP

EAGLE
DIRECTIONAL SERVICES, INC.



Form 3160-4
(July 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

C/SF

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO. LC-062412 NM-05572

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO. EMPIRE ABO UNIT"K" 17

9. API WELL NO. 30-015-00703

10. FIELD AND POOL, OR WILDCAT EMPIRE ABO

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA 1-18S-27E

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [ ] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other HORIZONTAL EXT

2. NAME OF OPERATOR: ARCO PERMIAN

3. ADDRESS AND TELEPHONE NO.: P.O.BOX 1610, MIDLAND, TX 79702 915 688-5672

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 1980 FSL & 660 FWL (UNIT LETTER L)
At top prod. interval reported below
At total depth: 1928 FSL & 2216 FEL

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: EDDY | 13. STATE: NM

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
05-22-95	06-08-95	06-13-95		

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
7705 MD 6091				X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD): 5797-7705 ABO

25. WAS DIRECTIONAL SURVEY MADE: YES

26. TYPE ELECTRIC AND OTHER LOGS RUN

27. WAS WELL CORED: NO

RECEIVED DEC 13 1995 OIL CON. DIV. DIST. 2

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8 5/8	24	1470	12 1/4	CIRC	0
5 1/2	14	6137	7 7/8	CIRC	0

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8	5906	5772

31. PERFORATION RECORD (Interval, size and number): 5797-7705 OH

ACCEPTED FOR RECORD DEC 4

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5797-7705	A W/1700 GALS

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump)	WELL STATUS (Producing or shut-in)
06-13-95		

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL - BBL.	GAS - MCF.	WATER - BBL.	GAS - OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL - BBL.	GAS - MCF.	WATER - BBL.	OIL GRAVITY - API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS: DIRECTIONAL SURVEY

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Ken W Gosnell TITLE AGENT DATE 11-16-95

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH

N.M. Oil Cons. Division
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation: 8910138010
8. Well Name and No.: Empire Abo Unit "K" 17
9. API Well No.: 30-015-00703
10. Field and Pool, or exploratory Area: Empire Abo
11. County or Parish, State: Eddy NM

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other
2. Name of Operator: ARCO Permian
3. Address and Telephone No.: P.O. Box 1089, Eunice, NM 88231 505-394-1649
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): Unit Letter L, 1980' FSL & 660' FWL, Section 1, T18S, R27E

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[ ] Subsequent Report	[X] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

TD: 6137' PBD: 6101' PERFS: 5800-7705'

MIRUPU. POH w/rods & pmp. NDWH. NUBOP. Release TAC @ 5705'. POH w/tbg & TAC.
RIH w/4-3/4" bit & scraper to top of whipstock @ 5782'. POH.
RUWL. GIH w/CIBP & set @ 5770'. POH.
GIH & perf w/2JSPF 5472-5736'. POH. GIH w/PPI tools & breakdown perfs f/5472-5736' w/50 gals/ft. 15% HCL NEFE. POH.
RIH w/bull plugged MA, perf sub, SN & 2-3/8" tbg. Land SN at +/- 5736'.
NDBOP. NUWH. Swab for test. GIH w/GA, pmp & rods. Hang well on. RDPU. RTP.

APPROVED

14. I hereby certify that the foregoing is true and correct
Signed [signature] Title Sr. Administrative Assistant Date 01/08/02

(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statem or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-104A
March 19, 2001

Submit 1 copy of the final affected wells list along with 1 copy of this form per number of wells on that list to appropriate District Office

Change of Operator

Previous Operator Information:		New Operator Information:	
		Effective Date:	12/31/2001
OGRID:	000900	New Ogrid:	000778
Name:	ARCO Permian	New Name:	BP America Production Company
Address:	P.O. Box 3092	Address:	P.O. Box 3092
Address:		Address:	
City, State, Zip:	Houston, Texas 77253	City, State, Zip:	Houston, TX 77253

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the attached list of wells is true and complete to the best of my knowledge and belief.

New Operator Signature: Mary Corley

Printed name: Mary Corley

Title: Sr. Regulatory Specialist

Date: 12/10/2001 Phone: 281-366-4491

RECEIVED
OCD - ARTESIA

Previous operator complete below:

Previous Operator: ARCO Permian

Previous OGRID: 000990

Signature: Mary Corley

Printed Name: Mary Corley

NMOCD Approval

Signature: Jim W. Sum

Printed Name: District Supervisor

District:

Date: FEB 07 2002

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation: 8910138010
8. Well Name and No.: Empire Abo Unit "K" 17
9. API Well No.: 30-015-00703
10. Field and Pool, or exploratory Area: Empire Abo
11. County or Parish, State: Eddy NM

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other
2. Name of Operator: BP America Production Company
3. Address and Telephone No.: P.O. Box 1089, Eunice, NM 88231 505-394-1649
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): Unit Letter L, 1980' FSL & 660' FWL, Section 1, T18S, R27E

RECEIVED ARTESIA

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other Workover	[ ] Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

TD: 6137' CIBP: 5770' PERFS: 5472-5736'

05.30.02: Unset pmp & TOH w/rods & pmp. NDWH. NUBOP. Unsetat TAC & POH w/tbg.
05.31.02: TIH w/bit & scraper. Testing tbg to 5000# psi below slips. Tag @ 5780'. TOH.
06.03.02: RU & perf 2 JSPF 5472-79', 5492-94', 5498-5516', 5527-29', 5540-48', 5565-75', 5580-86', 5591-97', 5613-17', 5638-59', 5540-58', 5565-75', 5580-86', 5591-97', 5613-17', 5638-59', 5710-15', 5722-36', 230 holes. TIH w/treating pkr. Set @ 5383'.
06.04.02: Drop SV. RU & pmp 20 bbls 7.5% HCL to pickle tbg. Swab back acid. Fish SV. Pmp 5,150 gals 15% HCL w/350 ball sealers. TOH w/pkr. SION.
06.05.02: TIH w/3-3/4" bailer & recover ball seals. TOH. TIH w/production tbg. Set @ 5704'. SN @ 5720'. NDBOP. Set TAC NUWH.
06.07.02: Load & test to 500# psi. Held OK. In 24 hrs pmp 0 BO, 1 BW, 2 MCF.

ACCEPTED FOR RECORD
JUN 21 2002
LES BABYAK
PETROLEUM ENGINEER

14. I hereby certify that the foregoing is true and correct
Signed [signature] Title Sr. Administrative Assistant Date 06.18.02

(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statem or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

30-015-[redacted]03

[redacted]

466850-W
2811047-G
2811057-O
2812373-G

DD-105(H)
Appv 1-18-95

[redacted]

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

EC

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMNM0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM70945X

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
EMPIRE ABO K 17

2. Name of Operator
BP AMERICA PRODUCTION CO

Contact: KELLIE D. MURRISH
E-Mail: murrikd@bp.com

9. API Well No.
30-015-00703-00-S1

3a. Address
~~HOUSTON, TX 77253~~ Eunice, NM 88231

3b. Phone No. (include area code)
Ph: 505.394.1649
Fx: 505.394.1624

10. Field and Pool, or Exploratory
EMPIRE

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 1 T18S R27E NWSW 1980FSL 660FWL

RECEIVED
NOV 19 2004
OCD-ARTESIA

11. County or Parish, and State
EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☒ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

TD: 6137' PBD: 5770' CIBP PERFS: 5472-5736'

SET CIBP @ 5442' W/35' CMT ON TOP
CIRC HOLE W/PKR FLUID
TEST TO 500# FOR 30 MINS. CUT CHART
IDLE WELL

ATTACHMENT: WELLBORE SCHEMATIC EAU-N-901

* Perform MIT + submit justification for TA status.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #35932 verified by the BLM Well Information System
For BP AMERICA PRODUCTION CO, sent to the Carlsbad
Committed to AFMSS for processing by ARMANDO LOPEZ on 09/10/2004 (04AL0355SE)

Name *(Printed/Typed)* KELLIE D. MURRISH — Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) — Date 09/10/2004

Accepted for Record - NMOCD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By **/s/ Joe G. Lara** — Title Petroleum Engineer — NOV 16 2004

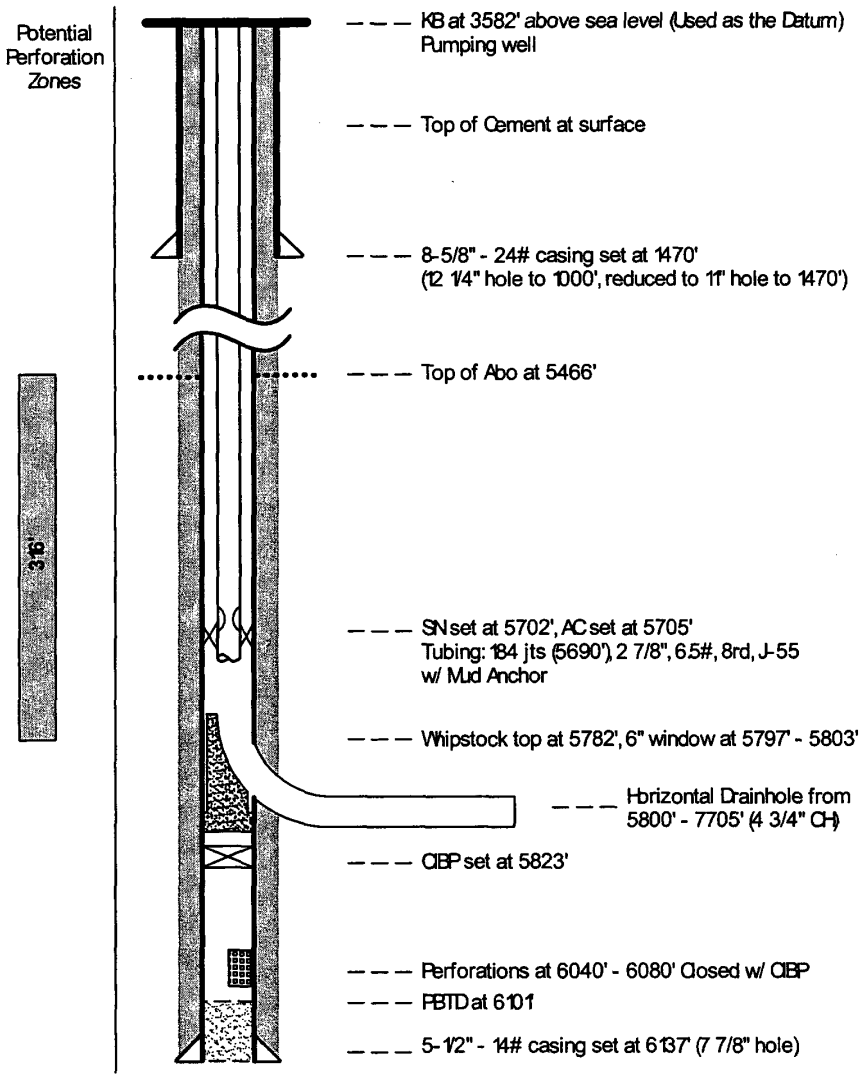
* Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Empire Abo Unit "K" 17



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

29-Jul-05

BP AMERICA PRODUCTION COMPANY
PO Box 1089
Eunice NM 88231-0000

NOTICE OF VIOLATION - Inactive Well(s)

Dear Operator:

A review of our records and recent inspection(s) indicate that the subject well(s) has been shut-in for an extended period of time. Rule 201 of the Rules and Regulation of the Oil Conservation Division provides that a well may be shut-in no longer than sixty days after suspension of drilling operations, upon determining that ther well is no longer usable (e.g., a dry hole), or one year after last production. To comply with guidelines as established in the Rules and Regulations, corrective actions must be taken immediately and the well(s) brought into compliance.

The detail section below indicates preliminary findings and/or probable nature of the violation.

The following options are available:

1. Immediately restore the well(s) to production, injection or disposal as applicable.
2. Request 'Temporary Abandoned' status pursuant to Rule 203, which requires that you set a plug and conduct a mechanical integrity test.
3. Submit a proposal to 'Plug and Abandon' the well(s) pursuant to Rule 202, proceed with plugging procedures on a timely basis after the proposal has been evaluated, amended and/or approved.

In the event that a satisfactory response is not received to this letter of direction by the "Corrective Action Due By:" date shown above, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of CIVIL PENALTIES for your violation of OCD rules.

IDLE WELL INSPECTION DETAIL SECTION

EMPIRE ABO UNIT 017A L-1-18S-27E **30-015-00703-00-00** **Inspection No.** iCLB0521037721

Inspection Date: 7/29/2005 10:28:39 AM **Corrective Action Due by: 11/1/2005**

Type Inspection	Inspector	Violation?	*Significant Non-Compliance?
Routine/Periodic	Chris Beadle	Yes	No

Comments on Inspection: idle Well (Rule 201). No flowline attached, no production equipment on site. Last reported production was December 2002. Marker approximately 15 feet from wellhead for new well (AAO Federal 9).

Thank you for your prompt attention to this matter and your efforts in helping to protect our environment and the infrastructure of the oil and gas industry.

Sincerely,

Artesia OCD District Office

* Significant Non-Compliance events are reported directly to the U.S. Environmental Protection Agency, Region VI, Dallas, Texas.

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

RECEIVED
OCT 1 1 2005
OCD-ARTESIA

5. Lease Serial No.
NMNM0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
EMPIRE ABO UNIT 17 'K'

2. Name of Operator
BP America Production Company

9. API Well No.
30.015.00703

3a. Address
P.O. Box 1089 Eunice NM 88231

3b. Phone No. (*include area code*)
505.394.1600

10. Field and Pool, or Exploratory Area
EMPIRE ABO

4. Location of Well (*Footage, Sec., T., R., M., or Survey Description*)
NWSW, SEC 1, T18S, R27E, 1980' FSL & 660' FWL

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[X] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[ ] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[ ] Final Abandonment Notice	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[X] Other IDLE WELL
	[ ] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

TD: 6137' PBD: 6101' VERTICAL PERFS: 5472-5736' CIBP: 5823'
WHIPSTOCK PERFS: 040-6080'

BP America Production Company requests a 60 day extention for the Notice of Violation - Idle Well issued by the New Mexico Oil Conservation Commission. The Corrective Action Due Date for this notice is 11.01.05.

The current scope of work includes testing the previous perfs @ 6050-6080 by:

MIRUPU
POH RODS & EQUIP
REMOVE WHIPSTOCK & CIBP
RIH W/PKR ASSY & SET BELOW HORIZONTAL SECTION
TEST LOWER PERFORATED INTERVAL
EVALUATE FINDINGS FROM LOWER ZONE

Accepted for record - NMOCD

14. I hereby certify that the foregoing is true and correct
Name (*Printed/Typed*)
Kellie D. Murrish

Title
Scheduler

Date 10.07.05

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

RECEIVED
OCT 18 2005
OCD-ARTESIA

5. Lease Serial No.
NMNM0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
EMPIRE ABO UNIT 17
'K'

2. Name of Operator
BP America Production Company

9. API Well No.
30.015.00703

3a. Address
P.O. Box 1089 Eunice NM 88231

3b. Phone No. (*include area code*)
505.394.1600

10. Field and Pool, or Exploratory Area
EMPIRE ABO

4. Location of Well (*Footage, Sec., T., R., M., or Survey Description*)
NWSW, SEC 1, T18S, R27E, 1980' FSL & 660' FWL

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[X] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[ ] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[X] Other IDLE WELL
[ ] Final Abandonment Notice	[ ] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

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WHIPSTOCK PERFS: 040-6080'

BP America Production Company requests a 60 day extention for the Notice of Violation - Idle Well issued by the New Mexico Oil Conservation Commission. The Corrective Action Due Date for this notice is 11.01.05.

The current scope of work includes testing the previous perfs @ 6050-6080 by:

MIRUPU
POH RODS & EQUIP
REMOVE WHIPSTOCK & CIBP
RIH W/PKR ASSY & SET BELOW HORIZONTAL SECTION
TEST LOWER PERFORATED INTERVAL
EVALUATE FINDINGS FROM LOWER ZONE

APPROVED FOR 2 MONTH PERIOD
ENDING 12/15/05

14. I hereby certify that the foregoing is true and correct
Name (*Printed/Typed*)
Kellie D. Murrish

Title
Scheduler

Date 10.07.05

Accepted for record - NMOCD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (ORIG. SGD.) ALEXIS C. SWOBODA
Title PETROLEUM ENGINEER
Date OCT 13 2005

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office RFO

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DEC 10 2008
OCD-ARTESIA

OCD ARTESIA

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No
NMNM0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM70945X

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
Empire Abo Unit 17 K

2. Name of Operator
BP America Production Company

9. API Well No.
30-015-00703

3a. Address
P.O. Box 1089 Eunice NM 88231

3b. Phone No. *(include area code)*
575-394-1648

10. Field and Pool, or Exploratory Area
Empire Abo

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Unit Letter L, 1980 FSL & 660 FWL
Section 1, T18S, R27E

11. County or Parish, State
Eddy NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[X] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[ ] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[ ] Final Abandonment Notice	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[ ] Other _____
	[ ] Change Plans	[X] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

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1. MIRU PU. Check tubing, casing and surface pipe for pressure - bleed off into containment. Kill well as necessary. Monitor well and assure it's stable. POH LD/warehouse rods and pump.
2. Monitor well and assure it is stable. ND WH, NU BOP. Release TAC and TOH.
3. * TIH with CIBP on 2 3/8" tubing and set at 5420'. Spot 250' cement plug on top of CIBP using 25 sx Class C neat. PU to 5150'. Load hole with mud-laden fluid (9 ppg, 1250# gel/100 bbl).
4. TOH to 3400' (Glorieta top = 3290'). Spot 25 sack balanced cement plug from 3400' - 3150'. TOH.
5. TIH with bull plug and perf nipple on tubing. Tag Glorieta plug; re-spot if necessary.
6. TOH to 1550' (8 5/8" surface casing shoe = 1470'). Spot 35 sack balanced cement plug from 1550' - 1200'. PU and WOC 2 hours. Tag plug, re-spot if necessary.
7. TOH to 300' (Yates top = 172'). Fill 5 1/2" casing from 300' to surface with 30 sx Class C neat. TOH LD tubing.
8. RD PU.
9. Dig out WH and cut-off casingheads to 3' below GL.
10. Install regulation dry-hole marker. Clean location and prepare location for BLM inspections.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

ACCEPTED FOR RECORD

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
Barry C. Price

Title
Area Operations Team Lead

Barry C. Price

DEC 10 2008

Date 11/18/08

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date
DEC 1 2008

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

APPROVED
JAMES A. AMOS
SUPERVISOR-EPS

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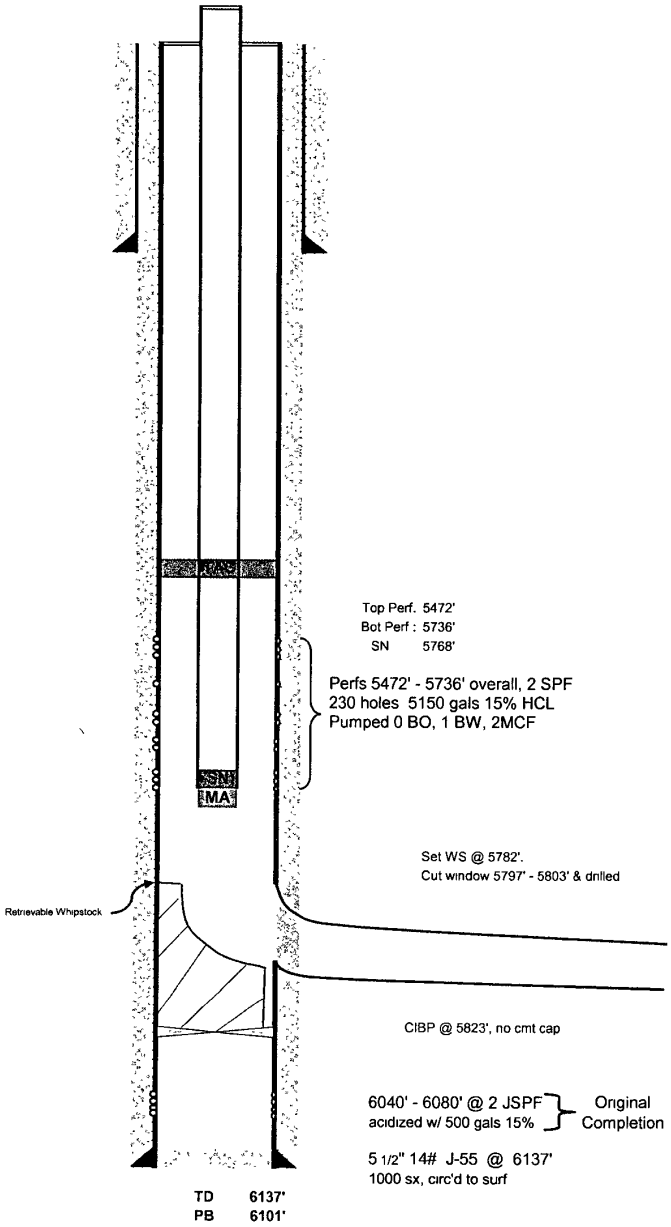


Existing WB Dia		Empire Abo Unit K-17			
Status	Producing		Operator	BP America	
Lease	Empire Abo Unit		Zone	0	
Field	0		API	30-015-00703	
NMOCD	Empire Abo Unit K-17		NMOCD		
Location	1980' FSL & 660 FWL, S-01 T-18S R-27E				
Reference					
KB	3,582	TVD	6137'	PBTD	6101'
GL	3,569	MTD		Last CIBP	5770'

Casing	Weight/Grade	Depth	Cmt Sx	Hole	TOC
8 5/8"	24#/J-55	1468	750 sx	11"	surf
5 1/2"	15.5#/J-55	6137	1000 sx	7 7/8"	surf
0	0	0	0	0	0
Spud	3/26/1959		Top Perf	5472'	
Completion	4/20/1959		Bot Perf	5736'	

Perforation History

5472'-5736' (behind cibp.6040' - 6080')

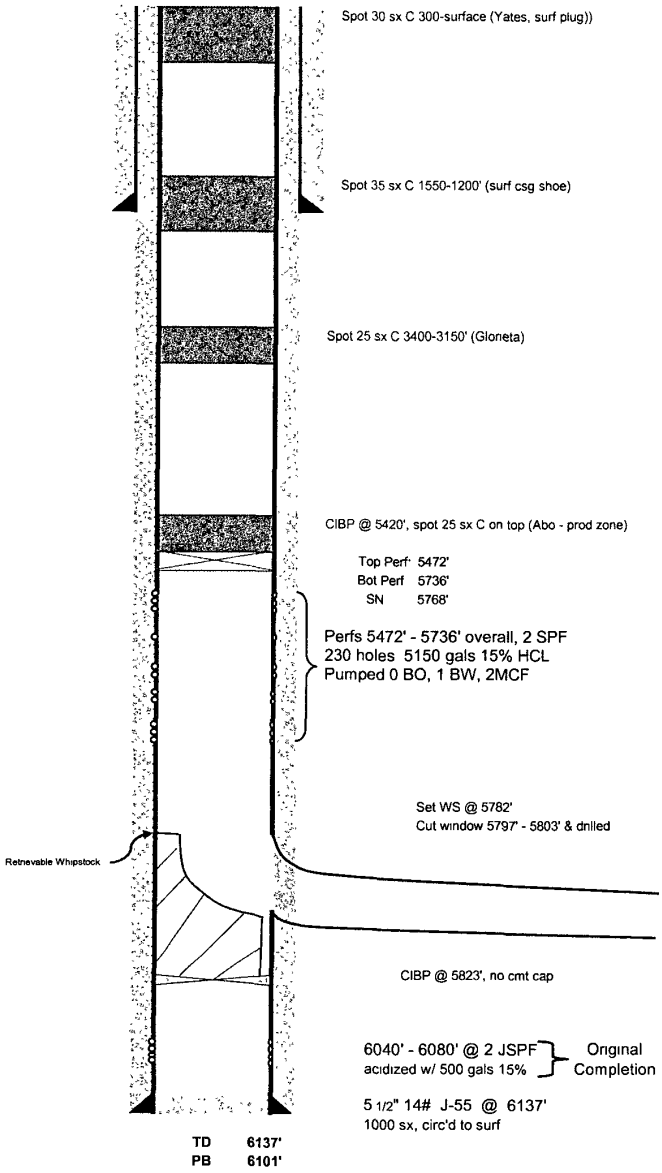
Packers, Plugs, and Cement

CIBP @ 5770', 5823'

Current Tubulars: Blue boxes use drop down boxes for descriptions

Date sketch checked	2/11/08	by		
Date tubulars checked		by		

Tubing and Rod Assembly			length, ft	Top of Depth from KB, ft
# Jnts	Description of TBG Assembly	RKB	12 00	
173	2 3/8" 4.7# J-55 EUE, 8 Rnd Tbg		5448 98	12 00
1	2 3/8" X 5.5" OD TAC		2 75	5460 98
9	2.3/8" 4.7# J-55 EUE 8 Rnd Tbg		272 65	5463 73
1	2 3/8" 4.7# J-55 EUE 8 Rnd IPC Tbg		32 46	5736 38
1	2.3/8" API SN		1 10	5768.84
1	3 1/2" 9.5# J-55 Slotted MA w/Bull Plug		25 68	5769 94
				5795 62
				5795 62
				5795.62
				5795 62
				5795.62
				5795 62
				5795 62
	Current Rod Design			
# Rods	Description of Rod Assembly	RKB	12 00	
1	1 1/4" Dia X 22' PR w/1 1/2" X 16' PR liner		22 00	12.00
112	1.00" FG Rods with Couplings		4200 00	34.00
40	7/8" Dia "C" Rods		1000 00	4234 00
19	1 5/8" "C" Sinker Bars		475 00	5234.00
1	1 5/8" "C" Sinker Bars		25 00	5709 00
1	Pump with gas anchor		36.00	5734.00
				5770 00
				5770 00
				5770 00
				5770 00
				5770 00
	2 0 x 1 5 x 26' w/ gas stinger anchor 1"x10'			5770 00
				5770 00



Proposed WB Dia			Empire Abo Unit K-17		
Status	Producing		Operator	BP America	
Lease	Empire Abo Unit		Zone	0	
Field	0		API	30-015-00703	
NMOCD	Empire Abo Unit K-17		NMOCD		
Location	1980' FSL & 660 FWL, S-01 T-18S R-27E				
Reference					
KB	3,582	TVD	6137'	PBTD	6101'
GL	3,569	MTD		Last CIBP	5770'

Casing	Weight/Grade	Depth	Cmt Sx	Hole	TOC
8 5/8"	24#/J-55	1468	750 sx	11"	surf
5 1/2"	15.5#/J-55	6137	1000 sx	7 7/8"	surf
0	0	0	0	0	0
Spud	3/26/1959		Top Perf	5472'	
Completion	4/20/1959		Bot Perf	5736'	

Perforation History

5472'-5736' (behind cibp.6040' - 6080')

Packers, Plugs, and Cement.

Whipstock 5782-5812', CIBP @ 5823'

Current Tubulars: Blue boxes use drop down boxes for descriptions

Date sketch checked	2/11/08	by:		
Date tubulars checked		by:		

Tubing and Rod Assembly			length, ft	Top of Depth from KB, ft
# Jnts	Description of TBG Assembly	RKB	12 00	
173	2 3/8" 4.7# J-55 EUE 8 Rnd Tbg		5448 98	12 00
1	2 3/8" X 5.5" OD TAC		2 75	5460 98
9	2 3/8" 4 7# J-55 EUE 8 Rnd Tbg		272 65	5463.73
1	2 3/8" 4.7# J-55 EUE 8 Rnd IPC Tbg		32.46	5736 38
1	2 3/8" API SN		1 10	5768 84
1	3 1/2" 9.5# J-55 Slotted MA w/Bull Plug		25 68	5769 94
				5795 62
				5795 62
				5795 62
				5795.62
				5795.62
				5795 62
				5795.62
	Current Rod Design			
# Rods	Description of Rod Assembly	RKB	12 00	
1	1 1/4" Dia X 22' PR w/1 1/2" X 16' PR liner		22 00	12 00
112	1 00" FG Rods with Couplings		4200 00	34 00
40	7/8" Dia "C" Rods		1000 00	4234 00
19	1 5/8" "C" Sinker Bars		475 00	5234.00
1	1 5/8" "C" Sinker Bars		25.00	5709.00
1	Pump with gas anchor		36 00	5734.00
				5770 00
				5770 00
				5770 00
				5770 00
				5770 00
	2 0 x 1 5 x 26' w/ gas stinger anchor 1"x10'			5770 00
				5770.00

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Permanent Abandonment of Federal Wells
Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within **ninety (90)** days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

2. **Notification: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.**

3. Blowout Preventers: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. Mud Requirement: Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of water. Minimum nine (9) pounds per gallon.

5. Cement Requirement: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. In lieu of a cement plug in a cased hole, a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. Dry Hole Marker: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).

7. Subsequent Plugging Reporting: Within 30 days after plugging work is completed, file one original and five copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**

8. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration conditions of approval will be developed and furnished to you.

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FEB 18 2009

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5 Lease Serial No.
NMNM0557371

6 If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No
NMNM70945X

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8 Well Name and No
Empire Abo Unit 17
K

2. Name of Operator
BP America Production Company

9. API Well No
30-015-00703

3a. Address
P.O. Box 1089 Eunice NM 88231

3b. Phone No. (*include area code*)
575-394-1648

10. Field and Pool, or Exploratory Area
Empire Abo

4. Location of Well (*Footage, Sec, T., R, M., or Survey Description*)
Unit Letter L, 1980 FSL & 660 FWL
Section 1, T18S, R27E

11. County or Parish, State
Eddy NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[ ] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[X] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[ ] Final Abandonment Notice	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[X] Other Remove CIBP
	[ ] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones Attach the Bond under which the work will be performed or provide the Bond No on file with BLM/BIA Required subsequent reports shall be filed within 30 days following completion of the involved operations If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection)

SUBSEQUENT REPORT FOR THIS WORK WAS INADVERTENTLY OVERLOOKED AND BP FAILED TO FILE OR NOTIFY OF RTP. REPORT NOW BEING SUBMITTED TO UPDATE BLM RECORDS. 1/20/06: MIRUPU. Unseat pump lay down 66-1' rods, 69 7/8' rods, 82 3/4' rods, 10 7/8' rods w/ g & pump. Prep to NU BOP. 1/23/06: NDWH NU BOP release TAC laydown prod tbg. 1/24/06: TIH w/ 4 3/4' bit picking up 66 jt 2 7/8 DP & 2 7/8 tbg workstring to 5100'. 1/25/06: RU foam air unit break circ w/ air TIP tag CIBP @ 5768' by our SLM. RU power swivel start drlg on CIBP. Plug turned loose in 2 hr. Push to 5779' circ clean w/ foam air blow well down. 1/26/06: TIH push CIBP to end of horizontal @ 7700' TOH laydown 2 7/8". 1/27/06: Pick up hook, bumper sub, jars, & 4 3 1/2" DC - TIH w/tbg fish for Whipstock from 5736 5862' no bite. TOH w/ hook prep to run box tap. 1/30/06: TIH w/ box tap, BS, Jars, 4 3 1/2" DC & tbg tag whipstock @ 5806' work over fish try to work whipstock loose kept pulling off. TOH WOO. 1/31/06: Rig down foam air unit & power swivel - laydown DC - TIH w/ work string & laydown same - chg out tbg & BOP rams. 2/1/06: Pickup 2 3/8 prod tbg test in hole 5000 psi below slips. 2/2/06: ND BOP NUWH. Pickup pump & new rod design space well out left 7' of polish rod out load & test to 500 psi-ok - no pump action - unseat pump flush 10 bbl water - load test to 500 psi-ok-still no pump action. 2/3/06: TOH w/ rods & pump. Run swab to ck fluid level dry. WOO. 2/6/06: Pump 30 bbl while adding 2 jt to lower SN to 5769' swab test no fluid. 2/7/06: Swab test still no fluid. 2/8/06: Run pump & rods L&T to 500 psi-ok. RD. RTP well test 11/5/06-6 mcf gas, 8 bbls oil, 1 bbl water.

14 I hereby certify that the foregoing is true and correct
Name (*Printed/Typed*)
Barry C. Price

Title
Area Operations Team-Leader

Date 2/2/09

ACCEPTED FOR RECORD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date FEB 16 2009

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

Office

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Title 18 U.S.C Section 1001, and Title 43 U.S.C Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

FOR RECORDS ONLY

OCD-ARTESIA

MAR 30 2009

Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No. NMNM0557371

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

7. If Unit of CA/Agreement, Name and/or No. NMNM70945X

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No. EMPIRE ABO UNIT K 17

2. Name of Operator BP AMERICA PRODUCTION COMPANY

9. API Well No. 30-015-00703

3a. Address P.O. BOX 1089, EUNICE NM 88231

3b. Phone No. *(include area code)* 575-394-1648

10. Field and Pool or Exploratory Area EMPIRE ABO

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
UNIT LETTER L, 1980 FSL & 660 FWL, SECTION 1, T18S, R27E

11. Country or Parish, State EDDY NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☑ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other _____
	☐ Change Plans	☑ Plug and Abandon	☐ Temporarily Abandon	_____
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	_____

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

3/12/09: ND WH. RELEASE TAC. NU BOP. POH LAYING DOWN TBG.
3/13/09: RIH W/ 4 3/4" BIT, CSG SCRAPER & 185 JTS 2 3/8" TBG TO 5787'. POH W/ TBG TO 3523'.
3/16/09: KILL WELL W/ 20 BBL BRINE. POH W/ 2 STANDS TBG. POH W/ TBG & SCRAPER. LAY DOWN SCRAPER. RIH W/ CIBP & TBG. SET CIBP @ 5770'. PUMP 25 BBL FRESH WATER ON VACUUM. PUMP 20 SX CMT ON VACUUM. DISPLACED W/ 20 BBL FRESH WATER ON VACUUM. POH LAYING DOWN 11 JTS TBG. FLUSH TBG W/ 10 BBL FRESH WATER ON VACUUM.
3/17/09: POH W/ TBG. RIH W/ CIBP & 2 3/8" TBG. SET CIBP @ 5420'. DISPLACE CSG W/ FRESH WATER. TEST TO 500 PSI. TEST GOOD. SPOT 25 SX CMT FROM 5420' TO 5179'. LAY DOWN 8 JTS TBG. DISPLACE CSG FROM 5160' TO SURFACE. POH LAYING DOWN TBG TO 3416'. SPOT 25 SX CMT FROM 3416' TO 3175'. POH W/ TBG & SETTING TOOL. RIH W/ SLOTTED SUB ON 2 3/8" TBG.
3/18/09: RIH W/ TBG. TAG CMT @ 3152'. LAY DOWN 51 JTS TBG TO 1566'. MIX & PUMP 170 SX CMT FROM 1566' TO SURF. POH LAYING DOWN TBG. ND BOP. TOP OFF CSG W/ 5 SX CMT. RD.
3/19/09: DIG OUT AROUND WELLHEAD. CUT OFF ALL ANCHORS AND WELL HEAD, WELD IN PLATE, 1" NIPPLE & VALVE, DRY HOLE MARKER, BACKFILL AND LEVEL LOCATION.

Approved as to plugging of the well bore. Liability under bond is retained until Surface restoration is completed.

14. I hereby certify that the foregoing is true and correct.
Name *(Printed/Typed)* BARRY C. PRICE

Title AREA OPERATIONS TEAM LEAD

Signature Barry C. Price

Date 03/23/2009

APPROVED
MAR 26 2009
JAMES A. AMOS
SUPERVISOR-EPS

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

3/31/09

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA
APR 15 2009

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

LM

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
NMNM0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM70945X

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
Empire Abo Unit 17
K

2. Name of Operator
BP America Production Company

9. API Well No.
30-015-00703

3a. Address
P.O. Box 1089 Eunice NM 88231

3b. Phone No. (*include area code*)
575-394-1648

10. Field and Pool, or Exploratory Area
Empire Abo

4. Location of Well (*Footage, Sec, T, R., M., or Survey Description*)
Unit Letter L, 1980 FSL & 660 FWL
Section 1, T18S, R27E

11. County or Parish, State
Eddy NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[ ] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[ ] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[X] Final Abandonment Notice	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[ ] Other _____
	[ ] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Per BLM letter referencing this well, dated March 27, 2009, all requirements have been met for final abandonment.

APPROVED
APR 11 2009
JAMES A. AMOS
SUPERVISOR-EPS

4/16/09

14. I hereby certify that the foregoing is true and correct
Name (*Printed/Typed*)
Barry C. Price

Title
Area Operations Team Lead

Date 4/7/09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon	Office	

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

APPENDIX C

USGS EARTHQUAKE DATA

SUBSURFACE

NEIC: Earthquake Search Results

U. S. GEOLOGICAL SURVEY

EARTHQUAKE DATA BASE

FILE CREATED: Mon Jun 4 16:13:25 2012
Circle Search Earthquakes= 225
Circle Center Point Latitude: 32.772N Longitude: 104.233W
Radius: 321.860 km
Catalog Used: PDE
Data Selection: Historical & Preliminary Data

CAT	YEAR	MO	DA	ORIG TIME	LAT	LONG	DEP	MAGNITUDE	IEM NFO TF	DTSVNWG	DIST km
PDE	1973	09	22	233835.80	34.47	-106.95	5	3.1 MLGS	...	.....	314
PDE	1974	11	28	033520.50	32.31	-104.14	5	3.7 MLGS	...	.....	51
PDE	1975	08	01	072757.30	31.42	-104.01	5	3.0 LgTUL	.F.	.....	150
PDE	1976	01	19	040330.50	31.90	-103.08	1	3.5 MDGS	.F.	.....	145
PDE	1976	01	22	072157	31.90	-103.07	1	2.8 MDGS	...	.....	145
PDE	1976	01	25	044827.90	31.90	-103.08	2	3.9 MDGS	5F.	.....	145
PDE	1977	01	04	183137.60	32.36	-106.92	5	3.2 MLGS	5F.	.....	256
PDE	1977	04	26	090307.30	31.90	-103.08	4	3.3 MLGS	.F.	.....	144
PDE	1977	11	28	014050.50	32.95	-100.84	5	3.5 MLGS	...	.....	318
PDE	1978	03	02	100452.70	31.56	-102.51	11	3.5 MLGS	.F.	.....	210
PDE	1979	07	05	010501	32.95	-100.89	4	2.7 UKTUL	.H.	.....	312
PDE	1980	03	22	004912.50	34.60	-105.92	5	3.4 MLGS	4F.	.....	255
PDE	1981	05	09	123550.80	33.99	-107.03	5	3.1 MLGS	5F.	.....	293
PDE	1982	01	04	165608.05	31.18	-102.49	5	3.9 LgTUL	3F.	.....	240
PDE	1982	03	16	110302.67	35.36	-103.27	5	3.1 LgTUL	3F.	.....	300
PDE	1982	04	26	083147.79	33.02	-100.84	5	2.8 LgGS	...	.....	318
PDE	1982	05	18	060008.50	34.17	-106.95	9	2.8 MLGS	.F.	.....	296
PDE	1982	05	18	060838.40	34.20	-106.90	6	2.8 MLGS	.F.	.....	293
PDE	1982	05	24	063251.70	34.17	-106.95	6	2.9 MLGS	.F.	.....	295
PDE	1982	09	20	035517.20	33.95	-107.06	11	3.5 LgTUL	4F.	.....	293
PDE	1982	10	07	124125.99	34.31	-106.82	4	2.4 MLGS	.F.	.....	294
PDE	1982	11	28	023648.51	33.00	-100.84	5	3.3 LgTUL	4F.	.....	318
PDE	1983	03	02	232219.40	34.30	-106.89	8	4.3 LgTUL	6D.	.....	299
PDE	1983	04	30	073420.18	33.32	-106.44	7	3.5 MLGS	...	.....	214
PDE	1983	09	15	232536.05	35.14	-104.39	5	3.2 LgTUL	5F.	.....	263
PDE	1983	09	29	074408.43	35.24	-104.30	5	2.7 MDGS	...	.....	274
PDE	1984	05	21	133113.54	35.07	-102.23	5	3.1 LgTUL	...	.....	314
PDE	1984	08	26	021954	34.31	-106.80	5	2.9 MLGS	.F.	.....	292
PDE	1984	12	04	203636.02	32.26	-103.56	5	2.9 MLGS	...	.....	84
PDE	1985	06	05	103600.60	32.56	-106.92	6	2.9 MLGLD	4F.	.....	252
PDE	1985	06	27	182000.03	33.62	-106.47	0	3.4 LgGS	...	....E..	229
PDE	1985	08	16	145652.96	34.13	-106.83	7	4.1 MLGS	6D.	.....	284

PDE	1985	09	06	052246.20	32.54	-106.94	5	2.6	MDGLD	.F.	255
PDE	1985	12	15	071452.23	35.28	-104.64	5	3.6	LgTUL	.F.	280
PDE	1986	04	17	210430.30	32.59	-106.91	5	2.7	MDGLD	.F.	251
PDE	1986	04	28	130016	34.01	-106.82	5	2.6	MDGLD	.F.	276
PDE	1986	08	27	180656.38	35.16	-105.09	5	3.2	MLGS	.F.	276
PDE	1987	05	14	155958.46	33.54	-106.52	0	2.9	MLGS	... .E..	229
PDE	1988	12	25	075233.93	35.12	-105.96	0	2.8	MDSNM	.F.	304
PDE	1989	01	29	050715.33	35.22	-104.09	7	3.4	MDSNM	... .	271
PDE	1989	11	29	065438.50	34.46	-106.89	13	4.7	MDSNM	5F.	309
PDE	1990	01	29	131610.68	34.46	-106.88	12	4.8	LgTUL	6D.	308
PDE	1990	01	31	010819.29	34.44	-106.86	10	4.0	LgTUL	5F.	306
PDE	1990	02	21	120219.34	34.01	-106.54	5	3.6	MLGS	.F.	255
PDE	1990	02	27	132322	33.95	-106.59	5	3.9	MDSNM	4F.	255
PDE	1990	05	05	162622.89	34.45	-106.88	6	3.6	MDSNM	.F.	307
PDE	1990	07	21	192822.79	34.46	-106.86	11	3.0	MDSNM	... .	306
PDE	1990	07	21	203031.34	34.46	-106.86	7	3.1	MDSNM	... .	306
PDE	1990	07	21	234804.92	34.45	-106.85	7	3.2	MDSNM	... .	306
PDE	1990	07	22	212705.13	34.84	-106.01	10	3.7	MDSNM	... .	281
PDE	1990	07	31	073240.18	34.46	-106.86	7	3.3	MDSNM	.F.	307
PDE	1990	11	08	104653.77	34.45	-106.86	6	4.3	MDSNM	4F.	306
PDE	1990	11	08	110346.51	34.45	-106.86	8	3.1	MDSNM	.F.	306
PDE	1990	11	10	121816.85	34.45	-106.85	7	3.1	MDSNM	... .	305
PDE	1990	11	15	072524.38	34.46	-106.86	6	3.6	MDSNM	4F.	306
PDE	1990	12	05	033644.30	34.45	-106.86	8	2.6	MDSNM	... .	306
PDE	1991	03	05	201711.40	34.44	-106.87	9	2.9	MDSNM	3F.	306
PDE	1991	03	06	143659.07	34.44	-106.88	7	2.5	MDSNM	... .	307
PDE	1991	06	05	184414.90	34.45	-106.85	4	3.0	MDSNM	.F.	305
PDE	1991	06	20	1605	33.62	-106.47	0	3.5	MLGS	... .E..	229
PDE	1991	12	09	124716.50	34.85	-106.55	14	3.1	LgTUL	3F.	314
PDE	1992	01	02	114535.61	32.33	-103.10	5	5.0	LgTUL	5F.	116
PDE	1992	02	23	161752.51	30.65	-105.51	5	3.4	LgTUL	... .	264
PDE	1992	08	24	012535.20	34.01	-106.86	5	2.6	MDSNM	.F.	280
PDE	1992	08	26	032452.67	32.17	-102.71	5	3.0	LgGS	... .	157
PDE	1993	03	24	023203.50	35.39	-104.19	5	3.0	LgGS	2F.	290
PDE	1993	06	10	1510	33.62	-106.47	0	3.2	MLGS	... .E..	229
PDE	1993	06	23	032312.28	31.35	-102.51	5	2.8	MDSNM	... .	226
PDE	1993	12	22	192511.39	33.33	-105.68	10	3.2	MDSNM	... .	148
PDE	1994	01	01	025131.29	34.44	-106.98	10	2.5	MDSNM	... .	314
PDE	1995	03	19	183643.97	35.00	-104.21	5	3.3	LgGS	... .	246
PDE	1995	04	14	003256.17	30.28	-103.35	17	5.7	MwGS	6CM	287
PDE	1995	04	14	011148.40	30.30	-103.35	10	2.7	LgGS	... .	286
PDE	1995	04	14	021426	30.30	-103.35	10	2.8	LgGS	... .	286
PDE	1995	04	14	021938.50	30.30	-103.35	10	3.3	LgGS	.F.	286
PDE	1995	04	14	034842	30.30	-103.35	10	2.6	LgGS	.F.	286
PDE	1995	04	14	041116	30.30	-103.35	10	2.4	LgGS	.F.	286
PDE	1995	04	14	055339	30.30	-103.35	10	2.7	LgGS	... .	286
PDE	1995	04	14	073936.50	30.30	-103.35	10	2.4	LgGS	.F.	286
PDE	1995	04	14	082712.50	30.30	-103.35	10	2.8	LgGS	.F.	286
PDE	1995	04	14	100258	30.30	-103.35	10	2.9	LgGS	.F.	286
PDE	1995	04	14	105720.40	30.30	-103.35	10	2.3	LgGS	.F.	286
PDE	1995	04	15	031805	30.30	-103.35	10	2.4	LgGS	.F.	286
PDE	1995	04	15	143329.51	30.27	-103.32	10	4.0	LgGS	6D.	290
PDE	1995	04	16	004043.30	30.30	-103.35	10	2.3	LgGS	... .	286
PDE	1995	04	16	102625.50	30.30	-103.35	10	2.5	LgGS	... .	286
PDE	1995	04	16	161609.60	30.30	-103.35	10	2.4	LgGS	... .	286
PDE	1995	04	17	085000.50	30.30	-103.35	10	2.5	LgGS	... .	286
PDE	1995	04	21	044144	30.30	-103.35	10	2.9	LgGS	3F.	286
PDE	1995	06	01	010615.70	30.30	-103.35	10	3.5	LgGS	4F.	286
PDE	1995	07	06	024151	30.30	-103.35	10	2.7	LgGS	.F.	286
PDE	1995	07	06	024704	30.30	-103.35	10	2.6	LgGS	.F.	286

PDE	1995	08	28	151339.05	34.21	-106.94	3	2.8	LgGS	5F.	297
PDE	1995	11	12	174559.40	30.30	-103.35	10	3.6	LgGS	.F.	286
PDE	1996	03	15	131757.22	33.59	-105.69	10	2.9	LgGS	.F.	163
PDE	1996	03	24	201612.70	34.26	-105.68	10	3.5	LgGS	.F.	212
PDE	1996	03	24	201923.10	34.27	-105.69	10	3.7	LgGS	.F.	214
PDE	1996	07	22	100614.98	34.20	-105.71	10	3.5	LgGS	.F.	209
PDE	1997	05	20	094105.82	34.19	-105.74	10	3.2	LgGS	.F.	210
PDE	1997	12	31	132830.05	34.53	-106.15	5	3.5	MLGS	.F.	264
PDE	1997	12	31	133206.60	34.55	-106.15	5	3.5	MLGS	... .	265
PDE	1997	12	31	133358.90	34.55	-106.15	5	3.4	MLGS	... .	265
PDE	1998	01	04	080531.87	34.55	-106.19	5	4.0	MLGS	.F.	268
PDE	1998	04	15	103342.42	30.19	-103.30	10	3.6	LgGS	.F.	299
PDE	1998	07	14	053848.75	35.34	-103.47	5	3.0	MDSNM	.F.	293
PDE	1999	03	01	080023.50	32.57	-104.66	1	2.9	LgGS	... .	45
PDE	1999	03	14	224317.97	32.59	-104.63	1	4.0	MDSNM	.F.	42
PDE	1999	03	17	122923.11	32.58	-104.67	1	3.5	MDSNM	... .	46
PDE	1999	05	30	190425.60	32.58	-104.66	10	3.9	MDSNM	... .	45
PDE	1999	08	09	065122.97	32.57	-104.59	5	2.9	MDSNM	... .	40
PDE	2000	02	02	071420.26	32.58	-104.63	5	2.7	LgGS	... .	42
PDE	2000	02	26	030100.83	30.24	-103.61	5	2.8	LgGS	.F.	286
PDE	2001	06	02	015553.72	32.33	-103.14	5	3.3	LgGS	... .	113
PDE	2001	11	22	000708.02	31.79	-102.63	5	3.1	LgGS	... .	186
PDE	2002	09	17	154514.47	32.58	-104.63	10	3.5	LgGS	... .	42
PDE	2002	09	17	233419.35	32.58	-104.63	10	3.3	LgGS	... .	43
PDE	2003	06	21	020309.56	32.67	-104.50	5	3.6	LgGS	... .	28
PDE	2004	05	23	092205.28	32.53	-104.57	5	4.0	mbGS	3F.	41
PDE	2004	05	24	213628.56	34.47	-106.90	5	3.5	MLGS	.F.	310
PDE	2004	06	22	085528.23	32.53	-104.58	5	3.7	LgGS	.F.	42
PDE	2004	08	26	184518.62	32.58	-104.50	5	3.4	MLGS	... .	33
PDE	2004	10	28	025904.82	32.60	-104.50	5	3.0	LgGS	... .	31
PDE	2004	11	14	212749.90	33.25	-106.20	5	3.5	LgGS	... .	191
PDE	2005	10	30	025734.81	34.07	-106.98	5	2.4	MLGS	.F.	292
PDE	2005	12	19	202740.37	32.53	-104.55	5	4.1	MwSLM	3FM	40
PDE	2005	12	22	143011.67	32.58	-104.57	5	3.6	LgGS	.F.	37
PDE	2006	01	27	100456.45	32.59	-104.55	5	2.7	LgGS	... .	35
PDE	2006	01	27	160745.84	32.55	-104.58	5	3.1	LgGS	... .	40
PDE	2006	02	04	195510.68	32.58	-104.62	5	2.7	MLGS	... .	42
PDE	2006	03	04	171458.25	30.29	-103.67	5	2.7	LgGS	... .	280
PDE	2006	03	20	175529.12	32.60	-104.56	5	3.0	MLGS	... .	36
PDE	2006	04	08	180835.23	31.95	-101.42	5	2.9	MLGS	... .	279
PDE	2006	08	12	104909.67	32.90	-100.89	5	2.8	LgGS	.F.	312
PDE	2007	05	23	051655.15	34.07	-106.94	5	3.4	MLGS	3F.	289
PDE	2008	01	29	102453.24	32.90	-100.84	5	3.3	LgGS	.F.	317
PDE	2008	02	18	1415	32.27	-101.42	0	2.1	LgGS	.C. ....E..	269
PDE	2008	04	16	090604.36	33.66	-106.06	5	2.7	MLGS	... .	196
PDE	2008	05	23	180305.86	32.50	-104.60	5	2.7	LgGS	... .	45
PDE	2008	07	18	173109.40	32.89	-100.84	5	2.7	LgGS	... .	317
PDE	2008	12	28	205659.99	30.44	-103.36	5	2.6	MLGS	... .	271
PDE	2009	01	30	014121.66	32.50	-104.61	5	2.7	LgGS	... .	46
PDE	2009	06	05	171732.94	31.35	-105.98	0	2.4	MLEPT	.F.	227
PDE	2009	06	05	181023.63	31.35	-105.98	0	2.6	MLEPT	.F.	227
PDE	2009	08	20	015723.10	34.03	-106.87	5	2.7	MLGS	3F.	282
PDE	2009	08	30	003100.29	34.22	-106.89	5	2.5	MLGS	.F.	293
PDE	2009	08	30	063947.47	34.16	-106.86	5	2.6	MLGS	.F.	289
PDE	2009	08	30	070943.72	34.19	-106.88	5	2.1	MLGS	.F.	291
PDE	2009	11	17	185306.84	32.43	-104.64	5	3.0	LgGS	... .	54
PDE	2010	01	27	045933.05	32.90	-100.83	5	3.1	LgGS	.F.	318
PDE	2010	02	21	095539.77	32.57	-104.61	5	2.8	LgGS	... .	41
PDE	2010	03	28	000355.08	32.44	-104.50	4	4.1	MwRMT	3FM	44
PDE	2010	04	11	195632.67	32.41	-101.06	5	2.9	LgGS	... .	300

PDE	2010	04	12	002005.97	32.94	-100.88	5	2.8	LgGS	...	.....	314
PDE	2010	05	09	071807.37	34.04	-106.83	5	2.1	MLGS	.F.	.....	279
PDE	2010	05	27	204721.87	31.11	-105.58	5	3.7	MLGS	...	.....	223
PDE	2010	05	31	215819.17	32.52	-104.61	5	4.0	MLGS	...	.....	44
PDE	2010	08	08	011238.07	32.90	-100.85	5	3.4	MwRMT	2FM	.....	316
PDE	2010	08	25	020514.32	32.95	-100.86	5	2.8	LgGS	...	.....	315
PDE	2010	08	29	124836.61	32.91	-100.92	5	2.6	LgGS	...	.....	310
PDE-W	2010	10	09	074227.63	32.93	-100.89	5	3.1	LgGS	...	.....	313
PDE-W	2010	10	26	065629.79	32.92	-100.85	5	3.1	LgGS	...	.....	316
PDE-W	2010	11	01	091058.42	33.00	-100.82	5	2.8	LgGS	...	.....	320
PDE-W	2011	01	11	043415.77	34.39	-106.99	5	2.7	MLGS	...	.....	312
PDE-W	2011	02	17	182534.41	30.11	-103.30	5	3.3	LgGS	...	.....	307
PDE-W	2011	03	01	033012.76	32.88	-100.84	5	3.1	LgGS	2F.	.....	317
PDE-W	2011	03	01	063159.89	32.84	-100.80	5	2.5	LgGS	...	.....	321
PDE-W	2011	03	12	152200.86	32.88	-100.90	5	3.0	LgGS	...	.....	312
PDE-W	2011	03	14	001948.80	32.96	-100.81	5	3.0	LgGS	...	.....	320
PDE-W	2011	03	28	091211.95	32.91	-100.82	5	3.0	LgGS	...	.....	320
PDE-W	2011	04	06	233835.45	34.40	-107.02	5	3.2	MLGS	...	.....	315
PDE-W	2011	04	25	165631.88	32.82	-100.84	5	2.5	LgGS	...	.....	317
PDE-W	2011	04	28	010341.97	30.74	-105.71	6	4.4	mbGS	.F.	.....	264
PDE-W	2011	04	28	035625.61	30.74	-105.78	10	4.0	mbGS	...	.....	268
PDE-W	2011	04	28	045834.59	30.68	-105.75	9	3.6	MwRMT	.FM	.....	272
PDE-W	2011	04	28	074903.45	30.82	-105.80	5	3.1	LgGS	...	.....	262
PDE-W	2011	04	28	075418.94	30.58	-105.85	5	2.7	LgGS	...	.....	286
PDE-W	2011	04	30	010716.82	30.76	-105.75	10	4.6	MDUNM	...	.....	265
PDE-W	2011	05	02	114328.24	30.73	-105.72	10	4.2	MwRMT	2FM	.....	266
PDE-W	2011	05	02	115836.35	30.74	-105.70	10	3.3	MLGS	...	.....	264
PDE-W	2011	05	02	134032.64	30.69	-105.75	10	3.3	MLGS	...	.....	271
PDE-W	2011	05	02	135536.79	30.73	-105.67	5	4.4	mbGS	2F.	.....	264
PDE-W	2011	05	03	025830.18	30.67	-105.73	10	3.8	MwRMT	.FM	.....	273
PDE-W	2011	05	03	114203.84	30.49	-105.68	10	2.8	MLGS	...	.....	287
PDE-W	2011	05	04	162627.03	30.71	-105.79	10	3.7	MwRMT	..M	.....	271
PDE-W	2011	05	05	052010.02	30.79	-105.76	10	3.6	MLGS	...	.....	262
PDE-W	2011	05	06	002426.09	30.75	-105.73	10	2.8	MLGS	...	.....	264
PDE-W	2011	05	06	004559.26	30.81	-105.71	10	2.8	MLGS	...	.....	258
PDE-W	2011	05	07	045100.88	30.64	-105.73	10	4.1	MDUNM	2F.	.....	275
PDE-W	2011	05	08	132449.65	30.75	-105.81	10	3.1	MLGS	...	.....	269
PDE-W	2011	05	08	134616.49	30.72	-105.76	10	3.2	MLGS	...	.....	269
PDE-W	2011	05	08	135758.52	30.71	-105.75	10	2.9	MLGS	...	.....	269
PDE-W	2011	05	08	190732.13	30.81	-105.31	10	3.0	MLGS	...	.....	239
PDE-W	2011	05	08	225459.93	30.74	-105.74	10	3.3	MLGS	...	.....	266
PDE-W	2011	05	09	064019.15	30.76	-105.69	10	3.9	MDUNM	.F.	.....	261
PDE-W	2011	05	10	184118.44	30.72	-105.72	10	3.4	MLGS	...	.....	267
PDE-W	2011	05	13	124916.26	30.76	-105.45	10	2.6	MLGS	...	.....	250
PDE-W	2011	05	14	220751.11	30.82	-105.74	10	3.9	MDUNM	.F.	.....	259
PDE-W	2011	05	17	200820	30.75	-105.74	10	4.2	MDUNM	...	.....	265
PDE-W	2011	05	19	103523.51	30.80	-105.69	10	3.4	MwRMT	..M	.....	258
PDE-W	2011	05	19	115649.90	30.72	-105.59	10	2.9	MLGS	...	.....	260
PDE-W	2011	05	20	231419.06	30.20	-105.55	10	2.7	MLGS	...	.....	310
PDE-W	2011	05	25	100301.09	30.70	-105.63	10	2.8	MLGS	...	.....	264
PDE-W	2011	05	27	014128.20	30.80	-105.76	10	3.6	MLGS	...	.....	261
PDE-W	2011	05	27	014908.92	30.98	-105.78	10	3.0	MLGS	...	.....	246
PDE-W	2011	07	14	102913.60	32.93	-100.81	5	2.5	LgGS	...	.....	321
PDE-W	2011	09	11	183635.11	32.74	-100.84	5	2.5	LgGS	3F.	.....	318
PDE-W	2011	09	11	203158.11	32.89	-100.85	5	2.8	LgGS	2F.	.....	316
PDE-W	2011	09	12	003149.11	32.80	-100.88	5	2.7	LgGS	2F.	.....	314
PDE-W	2011	09	12	022931.34	32.73	-100.85	5	2.5	LgGS	.H.	.....	317
PDE-W	2011	09	12	091946.71	32.85	-100.85	5	2.6	LgGS	...	.....	316
PDE-W	2011	09	12	092612.90	32.76	-100.84	5	2.7	LgGS	2F.	.....	317
PDE-W	2011	09	12	141834.05	32.82	-100.87	7	3.4	LgGS	3F.	.....	314

PDE-W	2011	09	28	214637.55	32.52	-104.66	5	2.7	LgGS	...	.....	48
PDE-W	2011	11	24	064959.99	32.95	-100.81	5	2.8	LgGS	...	.....	320
PDE-W	2011	11	24	231549.01	32.94	-100.85	5	3.1	LgGS	...	.....	317
PDE-W	2011	12	09	184733.24	32.94	-100.86	5	3.5	LgGS	3F.	.....	315
PDE-W	2011	12	17	144658.46	32.81	-100.85	5	3.2	LgGS	3F.	.....	316
PDE-W	2011	12	29	061907.64	32.81	-100.91	5	2.5	LgGS	...	.....	311
PDE-W	2011	12	29	114808.28	32.88	-100.83	5	2.5	LgGS	.F.	.....	318
PDE-W	2012	01	15	092901.68	31.23	-103.61	5	2.7	LgGS	2F.	.....	181
PDE-W	2012	01	24	182102.61	30.32	-103.38	5	3.6	LgGS	4F.	.....	283
PDE-W	2012	02	06	040024.75	32.09	-104.91	5	2.7	LgGS	...	.....	98
PDE-W	2012	03	06	031149.71	31.81	-106.31	5	2.5	MLGS	3F.	.....	223
PDE-W	2012	03	18	105722.43	32.28	-103.89	5	3.1	LgGS	...	.....	63
PDE-Q	2012	04	05	091115.95	31.57	-106.09	5	2.9	MLGS	.F.	.....	219

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