# UICI - 008 - 1

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

2013

#### AFFIDAVIT OF PUBLICATION

## STATE OF NEW MEXICO County of Bernalillo

SS

1

Sworn and subscribed before me, a Notary Public, in and for the County of Bernalillo and State of New Mexico this

PRICE \$98.42

Statement to come at end of month.

day of October

CLA-22-A (R-1/93)

ACCOUNT NUMBER 1009556

Affidavits 0



NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to Water Quality Control Commission Regulations {20.6.2.3106 NMAC) the following discharge permit application(s) has been submitted to the Director of the New Mexico Oil Conservation Division (OCD), 1220 S. Saint Francis Drive, Santa Fe. New Mexico 87505, and Telephone (505) 476-3440:

(UICh-O8-2) Navajo Refining Company, L.L.C. Michael G. McKee, Vice President and Refinery Manager, 501 East Main Street, P.O. Box. Drawer 159, Artesia New Mexico 88211-0159, has submitted a renewal application for operation of a previously approved Underground Injection Control (UIC) Class I fnon-hazardous) injection Well Discharge Permit (UICl-O08-2) for the Waste Disposal Well W2- Y/DW-2 (APIR 30-015-20894) (located 1980 FNL and 680 FWL (SW/4, NW/4) in Section 12, Township 18 South, Range 27 East, NMPM. Eddy

ALBUQUERQUE JOURNAL

THE SUNDAY JOURNAL

Albuquerque Publishing Company
7777 Jefferson N.E. Albuquerque, New Mexico 87109
P.O. Drawer J-T Albuquerque, New Mexico 87103
(505) 823-7777



#### NOTICE OF PUBLICATION

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

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(UICI-008-2) Navajo Refining Company, L.L.C. Michael G. MicKee, Vice President and Refinery Manager, 501 East Main Street, P.O. Box Drawer 159, Artesia New Mexico 88211-0159, has submitted a renewal application for operation of a previously approved Underground Injection Control (UIC) Class I (non-hazardous) Injection Well Discharge Permit (UICI-008-2) for the Waste Disposal Well #2- WDW-2 (APIR 30-015-20994) located 1980 FNL and 680 FWL (SW4, NW4) in Section 12, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico. The injection well is located approximately 10.5 miles east-southeast of Artesia on Hwy-62 from Hwy-285 and about 3.3 miles south of Hilliop Road Oil field exempt and non-exempt, non-hazardous industnal wastewater will be transported about 10.5 miles underground from the Navajo-Artesia Refinery located at 501 E. Main Street, Artesia, NiM via a 6 inch dia, pipeline to WDW-2 for disposal into the Woltcamp. Cisoo, and Canyon Formations in the injection interval from 7,570 to 8399 feet depth measured from KB at 3623 latel mean sea-level) at a daily rate not to exceed 500 gpm and at a maximum allowable surface injection fluid contains approximately 5500 ppm total dissolved solids (TDS). Ground water most likely to be affected by a split, leak or accidental discharge is at a depth of about 100 feet below the ground surface with a TDS concentration range from 100 - 1535 ppm. The injection zone TDS concentration range from 100 - 1535 ppm. The injection, monitioning of the well, associated surface facilities, and provides a contingency plan in the event of accidental discharges in order to project fresh water.

Any interested person may obtain further information from the OCD and may submit written comments to the Division Director at the address given above. The application and draft permit may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday, or may also be viewed at the OCD's web site.

http://www.emnrd.state.nm.us/ccd/ Persons interested in obtaining a copy of the application and draft

#### Ad Proof / Order Confirmation

Account Number 1009556

Ad Order Number 0001100602

2

N M DEPT OF ENERGY, MINERALS

10/3/2013 9:15:12AM

permit may contact OCD at the address given above. Prior to ruling on any proposed discharge permit or major modification, the Director shall allow a period of at least thirty (30) days after the date of publication of this notice, during which interested persons may submit comments or request that OCD hold a public hearing. Requests for a public hearing, shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines that there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed permit based on available information, including all comments received. If a public hearing is held, the director will approve or disapprove the proposed permit based on information in the application along with information submitted at the hearing.

Para ottener más información sobre esta sobcitud en español, sirvase comunicarse por tavor. New Mexico Energy, Minerals and Natural Resources Department (Depto. Del Energia, Minerals y Recursos Naturales de Nuevo México). Oil Conservación Division (Depto. Conservación Del Petróleo), 1220 South St. Francis Drive. Santa Fe. New México (Conlacto: Laura Juarez, 575-748-1283 x 100).

DONE at Santa Fe, New Mexico, on this 2nd day of October 2013.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION Jami Bailey, Director Journal: October 5, 2013

#### Affidavit of Publication

NO.

22752

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

#### **Legal Notice**

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

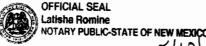
day as follows:		
First Publication	October 6, 2013	
Second Publication		
Third Publication		
Fourth Publication		
Fifth Publication		

Consecutive weeks/days on the same

Subscribed and sworn to before me this

7th day of October

2013



My commission expires

Notary Public, Eddy County, New Mexico

#### **Copy of Publication:**

#### LEGAL NOTICE

#### NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to Water Quality Control Commission Regulations (20.6.2.3106 NMAC) the following discharge permit application(s) has been submitted to the Director of the New Mexico Oil Conservation Division (OCD), 1220 S. Saint Francis Drive, Santa Fe, New Mexico 87505, and Telephone (505) 476-

(UICI-008-2) Navajo Refining Company, L.L.C. Michael G. McKee, Vice President and Refinery Manager, 501 East Main Street, P.O. Box Drawer 159, Artesia New Mexico 88211-0159, has submitted a renewal application for operation of a previously approved Underground Injection Control (UIC) Class I (non-hazardous) injection Well Discharge Permit (UICI-008-2) for the Waste Disposal Well #2- WDW-2 (API# 30-015-20894) located 1980 FNL and 660 FWL (SW/4, NW/4) in Section 12, (API# 30-015-20894) located 1980 FNL and 660 FWL (SW/4, NW/4) in Section 12, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico. The injection well is located approximately 10.5 miles east-southeast of Artesia on Hwy-82 from Hwy-285 and about 3.3 miles south of Hillitop Road. Oil field exempt and non-exempt, non-hazardous industrial wastewater will be transported about 10.5 miles underground from the Navajo-Artesia Refinery located at 501 E. Main Street, Artesia, NM via a 6 inch dia: pipeline to WDW-2 for disposal Into the Wolfcamp, Clisco, and Canyon Formations in the injection interval from 7,570 to 8399 feet (depth measured from KB at 3623 feet mean sea-level) at a daily rate not to exceed (depth measured from KB at 3623 feet mean sea-level) at a daily rate not to exceed 500 gpm and at a maximum allowable surface injection pressure of 1510 psig. The injection fluid contains approximately 5500 ppm total dissolved solids (TDS). Ground water most likely to be affected by a spill, leak or accidental discharge is at a depth of about 100 feet below the ground surface with a TDS concentration range from 100 - 1535 ppm. The injection zone TDS concentration ranges from 13,000 to 119,909 ppm. The discharge permit addresses well construction, operation, monitoring of the well, associated surface facilities, and provides a contingency plan in the event of accidental spills, leaks, and other accidental discharges gency plan in the storm in order to protect fresh water.

Any interested person may obtain further information from the OCD and may submit written comments to the Division Director at the address given above. The application and draft permit may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday, or may also be viewed at the OCD's web site http://www.emnrd.state.nm.us/ocd/. Persons interested in obtaining a copy of atte http://www.emnrd.state.nm.us/ocd/. Persons interested in obtaining a copy of the application and draft permit may contact OCD at the address given above. Prior to ruling on any proposed discharge permit or major modification, the Director shall allow a period of at least thirty (30) days after the date of publication of this notice, during which interested persons may submit comments or request that OCD hold a public hearing. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines that there is significant public interest.

If no public hearing is held the Director will approve or disapprove the proposed permit based on systlable insuration, including all comments received. If a public hearing is held, the director will approve or disapprove the proposed permit based on information in the application along with information submitted at the hearing.

Para obtener más información sobre esta solicitud en español, sirvase comuni-carse por favor. New Mexico Energy, Ministra and Natural Resources Department (Depto. Del Energia, Minerals y Repuisos (Saturales de Nuevo México), Oil Con-servation Division (Depto. Conservation 3 at Paracileo), 1220 South St. Francis Drive, Santa Fe, New México (Contacto: Laura Juarez, 575-748-1283 x 100).

DONE at Santa Fe, New Mexico, on this 2nd day of October 2013.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

Published in the Artesia Daily Press, Artesia, N.M., Oct. 6 2013. Legal No 22752.



Zone: C



P.O. Box 190 • Artesia , NM 88211-0190 • 575-746-3524

Bill to:	Sold to:	Account ID: 421
Fran Chavez Oil Conservation Division - EMNRD 1220 South St. Francis Dr. Santa Fe, NM 87505	Fran Chavez Oil Conservation Division - EMNRD 1220 South St. Francis Dr. Santa Fe, NM 87505	
Please pay from this Pre-Bill. Return stub with payment	Rep ID: LR	Terms: Net 30
Please pay from this Pre-Bill. Return stub with payment  Description	Rep ID: <b>LR</b>	Ter

Charges from 10/6/2013 to 10/6/2013

Classification of Ad: 450 - Legal Notice

PO: .....ext: Legal # 22752

Date	Pub Type	Description		Price	Discount	Applied	Due
10/6/13	ADP ad	Legal Notice: Legal	# 22752 - Legal	\$124.74			\$134.02
				1000 A 1000 B			

OK TO Pay Railulitus

Please return this portion with your payment.		Pre-Bill
Remit Payment to: Artesia Daily Press P.O. Box 190	Amount Due \$13	
Artesia, NM 88211-0190 Phone: 575-746-3524 Fax: 575-746-8795	Amount Enclosed	
	Issue Date: 10/6/2013	3
Fran Chavez Oil Conservation Division - EMNRD	Prebill Date: 10/7/2013	3
1220 South St. Francis Dr.	Ad # 50242	
Santa Fe, NM 87505	Account # 4212	

#### Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD

**Sent:** Wednesday, October 02, 2013 4:20 PM

To: Lane, James, DGF; Wunder, Matthew, DGF; Allison, Arthur, DIA;

'ddapr@nmda.nmsu.edu'; 'jjuen@blm.gov'; 'psisneros@nmag.gov';

'r@rthicksconsult.com'; 'sric.chris@earthlink.net'; 'nmparks@state.nm.us'; Verhines, Scott, OSE; 'peggy@nmbg.nmt.edu'; 'marieg@nmoga.org'; Fetner, William, NMENV; 'lazarus@glorietageo.com'; Winchester, Jim, NMENV; 'cnewman02@fs.fed.us'; Kieling,

John, NMENV; 'bsg@garbhall.com'; Schoeppner, Jerry, NMENV;

'claudette.horn@pnm.com'; 'ekendrick@montand.com'; 'staff@ipanm.org'; Gonzales, Elidio L, EMNRD; Leking, Geoffrey R, EMNRD; Dade, Randy, EMNRD; Bratcher, Mike, EMNRD; Perrin, Charlie, EMNRD; Kelly, Jonathan, EMNRD; Powell, Brandon, EMNRD;

Martin, Ed, EMNRD

Cc: Dawson, Scott, EMNRD; Sanchez, Daniel J., EMNRD

Subject: New Mexico Oil Conservation Division Underground Injection Control (UIC) Program

Class I (non-hazardous) Injection Well Permit Renewal Public Notices Navajo Refining

Company, LLC (Eddy County)

**Attachments:** UICI-8 WDW-1 PN 10-2-2013.pdf; UICI-8 WDW-2 PN 10-2-2013.pdf

#### Ladies and Gentlemen:

The New Mexico Oil Conservation Division (OCD) issued public notices for the above subject wells today. Please find attached the public notices that will be posted in the Albuquerque Journal and Artesia Daily Press soon.

Please click <u>here</u> to view the WDW-1 and WDW-2 discharge permit documents posted today on the OCD Website.

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: <u>CarlJ.Chavez@State.NM.US</u>

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

## State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez

Governor

David Martin

Cabinet Secretary Designate

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Jami Bailey
Division Director
Oil Conservation Division



**OCTOBER 2, 2013** 

## CERTIFIED MAIL RETURN RECEIPT NO: 7923 1282

Mr. Michael G. McKee Vice President and Refinery Manager Navajo Refining Company, L.L.C. 501 East Main Artesia, New Mexico 88210

Re: Discharge Permit (UICI-008-2) Renewal Application for Class I non-hazardous waste injection well (Waste Disposal Well No. 2 (WDW-2) - API No. 30-015-20894) located 1980 FNL and 660 FWL (SW NW) in Section 12, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico

Dear Mr. McKee:

Pursuant to the Water Quality Control Commission (WQCC) Regulations 20.6.2.3104 – 20.6.2.3114 NMAC, the Oil Conservation Division (OCD) hereby proposes to approve the renewal of the Navajo Refining Company, L.L.C. (Permittee) discharge permit for the above referenced Facility contingent upon the conditions specified in the attached draft Discharge Permit. Please review and provide comments to OCD on the draft Discharge Permit within 30 days of receipt of this letter.

If you have any questions, please contact Carl J. Chávez of my staff at (505) 476-3490 or E-mail: Carl J. Chavez@state.nm.us. On behalf of the OCD, I wish to thank you and your staff for your cooperation during this discharge permit review.

Sincerely,

Scott Dawson Deputy Director

SD/cjc

cc: OCD Artesia Office

#### **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 injection well 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 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

Page 3

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.

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, the Permittee shall provide analysis of the injected fluids at least quarterly to yield data representative of their characteristics.

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

- pH;
- Eh:
- Specific conductance;
- Specific gravity;
- Temperature; and,
- 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).
- **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 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), and Data Quality Objectives (DQOs).
- **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 by September 1<sup>st</sup>, December 1<sup>st</sup>, and March 1<sup>st</sup>, of each year. 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.

- **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**<sup>st</sup> 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 and DQO 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(s) performed with charts and report in accordance with the OCD's 2007 New Mexico Oil Conservation Division UIC Class I Well Fall-Off Test Guidance;
  - 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 oil field waste fluid (RCRA exempt and RCRA non-hazardous, non-exempt) into the Wolfcamp, Cisco, and Canyon Formations (formation injection intervals) through perforations set from: 7,570 feet to 8,399 feet (Note: Depths herein are referenced from KB ~13 feet above ground level) in its Class I non-hazardous waste injection well (WDW-2). The surface casing is set at 1,995 feet; the intermediate casing is set at 8,869 feet; the injection tubing is set at 7,528 feet; the packer is set at approximately 7,528 feet to contain annulus fluid. The top 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  $\pm$  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* 'Test Plan' approved by the OCD 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 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.

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## State of New Mexico Energy, Minerals and Natural Resources Department

**Susana Martinez** 

Governor

**David Martin**Cabinet Secretary Designate

Jami Bailey
Division Director
Oil Conservation Division



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

**OCTOBER 2, 2013** 

Mr. Michael G. McKee Vice President and Refinery Manager Navajo Refining Company, L.L.C. 501 East Main Artesia, New Mexico 88210

Re: Discharge Permit (UICI-008-2) Renewal Application for Class I non-hazardous waste injection well (Waste Disposal Well No. 2 (WDW-2) - API No. 30-015-20894) located 1980 FNL and 660 FWL, UL: E, Section 12, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico

Dear Mr. McKee:

The Oil Conservation Division (OCD) is in receipt of Navajo Refining Company, L.L.C.'s (NRC) discharge permit renewal application for its UIC Class I non-hazardous waste injection well. After review, OCD has determined that your application is "administratively complete" pursuant to New Mexico Water Quality Control Commission regulations (20.6.2.3108 NMAC).

NRC must now provide public notice and demonstrate that it has done so to OCD in a timely manner. OCD will also provide notice to various governmental groups. Depending upon the level of public interest, a hearing may be scheduled on this matter. Regardless, OCD will continue our review of the application and may request additional information.

If you have any questions, please do not hesitate to contact me by phone at (505) 476-3490, mail at the address below, or email at <a href="mailto:CarlJ.Chavez@state.nm.us">CarlJ.Chavez@state.nm.us</a>. On behalf of the OCD, I wish to thank you and your staff for your cooperation during this discharge permit review process.

Sincerely,

Carl J. Chávez

**Environmental Engineer** 

Caren. Chares

CJC/cjc

cc: OCD Artesia Office

#### NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to Water Quality Control Commission Regulations (20.6.2.3106 NMAC) the following discharge permit application(s) has been submitted to the Director of the New Mexico Oil Conservation Division (OCD), 1220 S. Saint Francis Drive, Santa Fe, New Mexico 87505, and Telephone (505) 476-3440:

(UICI-008-2) Navajo Refining Company, L.L.C. Michael G. McKee, Vice President and Refinery Manager, 501 East Main Street, P.O. Box Drawer 159, Artesia New Mexico 88211-0159, has submitted a renewal application for operation of a previously approved Underground Injection Control (UIC) Class I (non-hazardous) Injection Well Discharge Permit (UICI-008-2) for the Waste Disposal Well #2- WDW-2 (API# 30-015-20894) located 1980 FNL and 660 FWL (SW/4, NW/4) in Section 12, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico. The injection well 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. Oil field exempt and non-exempt, non-hazardous industrial wastewater will be transported about 10.5 miles underground from the Navajo-Artesia Refinery located at 501 E. Main Street, Artesia, NM via a 6 inch dia. pipeline to WDW-2 for disposal into the Wolfcamp, Cisco, and Canyon Formations in the injection interval from 7.570 to 8399 feet (depth measured from KB at 3623 feet mean sea-level) at a daily rate not to exceed 500 gpm and at a maximum allowable surface injection pressure of 1510 psig. The injection fluid contains approximately 5500 ppm total dissolved solids (TDS). Ground water most likely to be affected by a spill, leak or accidental discharge is at a depth of about 100 feet below the ground surface with a TDS concentration range from 100 - 1535 ppm. The injection zone TDS concentration ranges from 13,000 to 119,909 ppm. The discharge permit addresses well construction, operation, monitoring of the well, associated surface facilities, and provides a contingency plan in the event of accidental spills, leaks, and other accidental discharges in order to protect fresh water.

Any interested person may obtain further information from the OCD and may submit written comments to the Division Director at the address given above. The application and draft permit may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday, or may also be viewed at the OCD's web site <a href="http://www.emnrd.state.nm.us/ocd/">http://www.emnrd.state.nm.us/ocd/</a>. Persons interested in obtaining a copy of the application and draft permit may contact OCD at the address given above. Prior to ruling on any proposed discharge permit or major modification, the Director shall allow a period of at least thirty (30) days after the date of publication of this notice, during which interested persons may submit comments or request that OCD hold a public hearing. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines that there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed permit based on available information, including all comments received. If a public hearing is held, the director will approve or disapprove the proposed permit based on information in the application along with information submitted at the hearing.

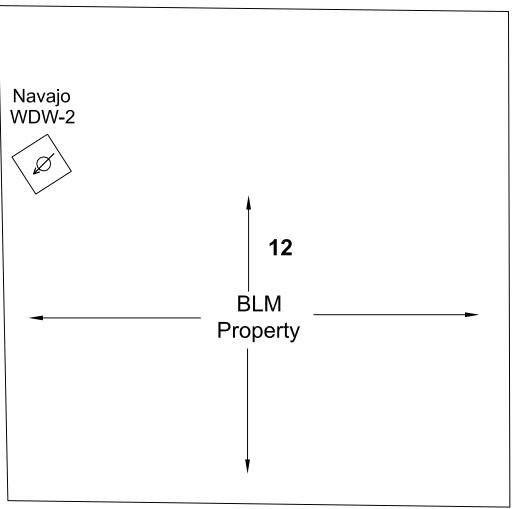
Para obtener más información sobre esta solicitud en español, sirvase comunicarse por favor: New Mexico Energy, Minerals and Natural Resources Department (Depto. Del Energia, Minerals y Recursos Naturales de Nuevo México), Oil Conservation Division (Depto. Conservacio´n Del Petróleo), 1220 South St. Francis Drive, Santa Fe, New México (Contacto: Laura Juarez, 575-748-1283 x 100).

DONE at Santa Fe, New Mexico, on this 2<sup>nd</sup> day of October 2013.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION Jami Bailey, Director

# APPENDIX A SURROUNDING LAND OWNERSHIP INFORMATION





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.



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





## NAVAJO REFINING COMPANY Map ID No. \ Artificial Penetration Review

. 85/8"@ 2589' W1900sx

	Artificial Penetration Review
OPERATOR Lime Rock Resources LEASE FEDERAL TSWD 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 @ 690	67' \[ \] \[ \]

3/2" + bg & pkr @ 6789'

Perfs: 6868'-7360'

Perfs: 7893'-7840'

CIBP@ 9040' w/35' cmt. cap

5'/2"@ 9473' w/4305x

CIBP@ 9950'

Perfs: 10,008'-10,054'

Liner @ 9055'-10,141'

TD: 10,141'

NL T... DOM 2/18/1

1. A 1000 mil.	
Queen	1219
Grayburg	2171
San Andres	2063
Glorieta	3480
Abo	
Wolfcamp	
Penn	8160
Strawn	1110
Hoka	9520
Morrow	9765

## 30-015-26<104

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> 1920410-0 1920430G 1920450·W

· Initial

Legel 2-14-91 Qual shal. 2583-9170 Qual Lat Cem Bond Log 6005-8090 9480-10126 Oual Spaced Neutron Pual spaced Neutron 8800-10141 NSL-2785 5-3-90

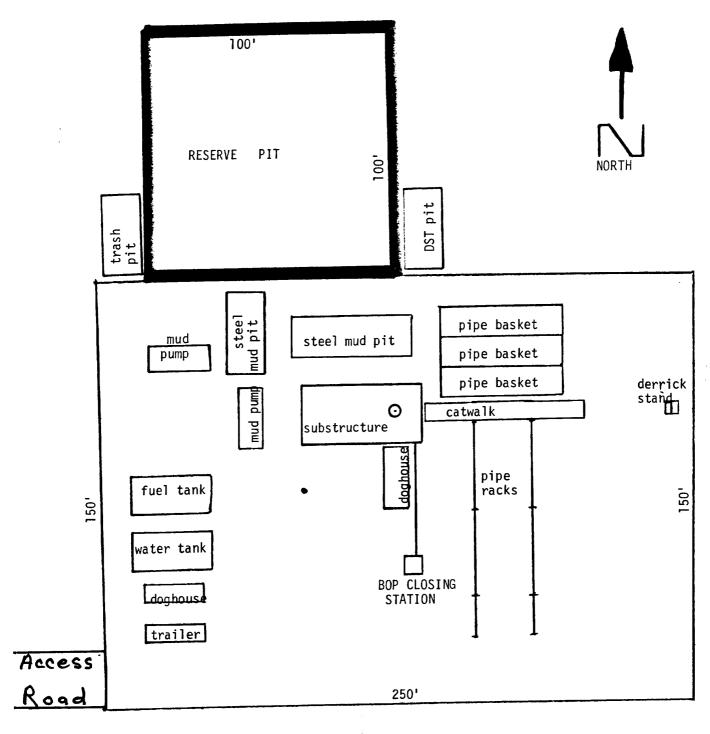
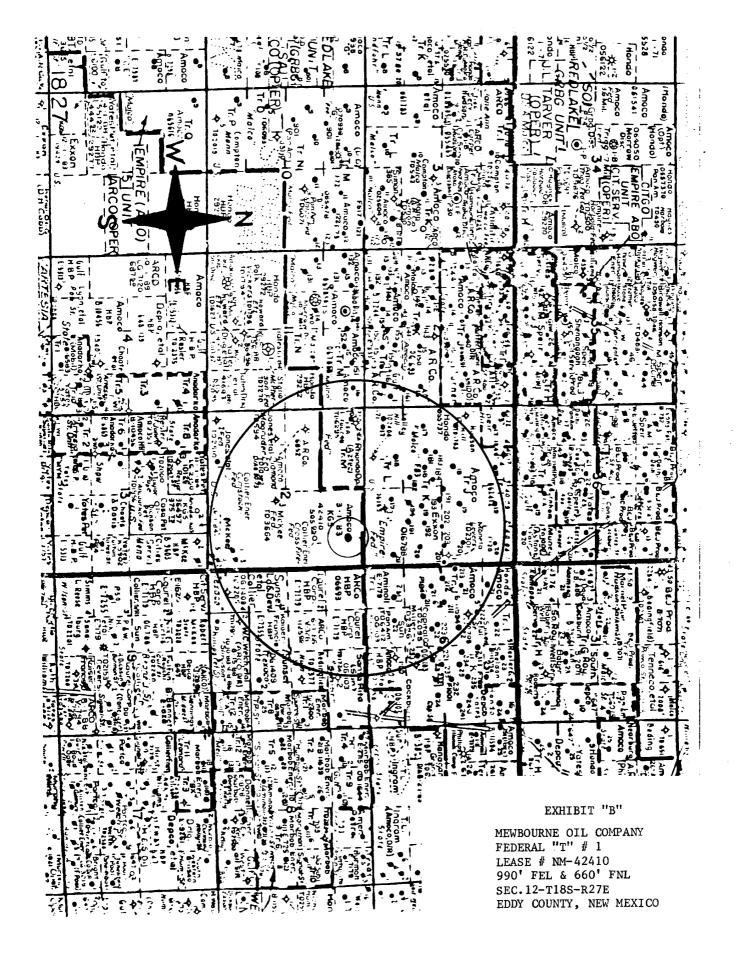
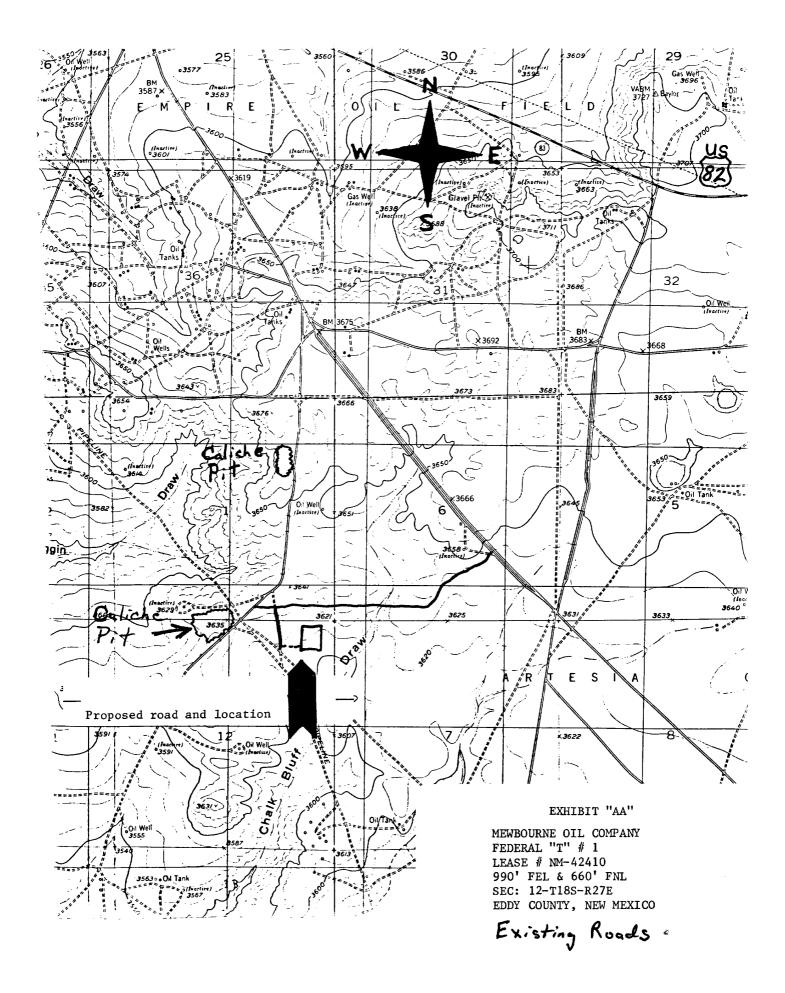
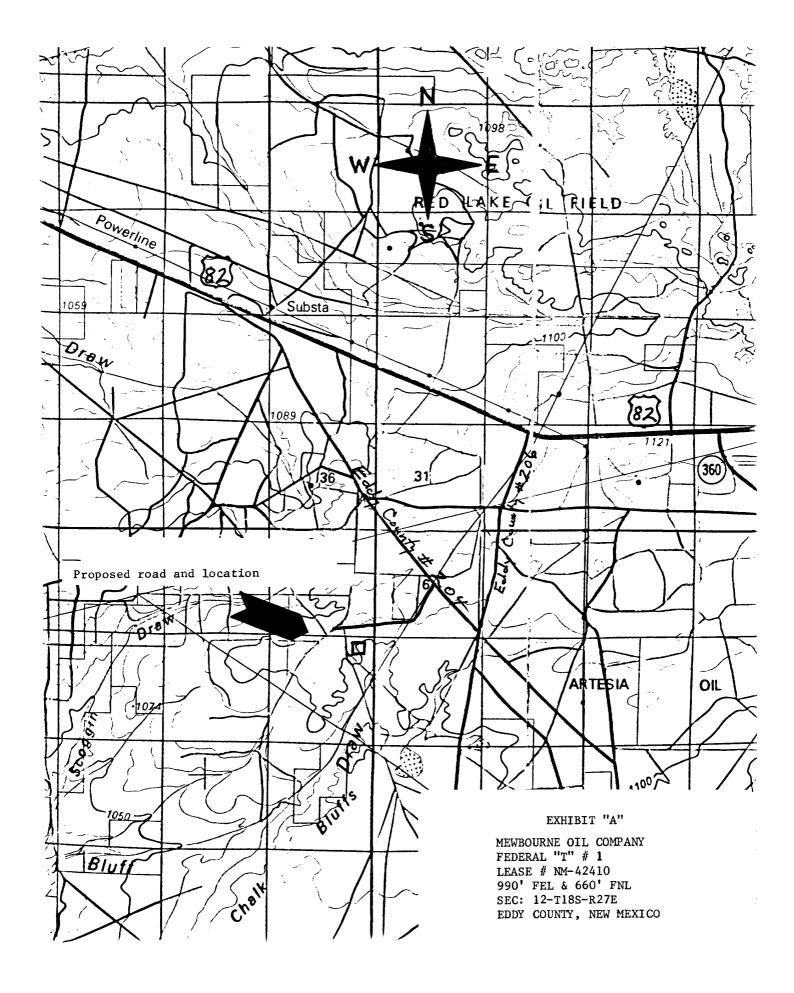


EXHIBIT "C"

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

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

May 3, 1990

Mewbourne Oil Company c/c 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. LeMan

WJL/MES/ag

cc: Oil Conservation Division - Artesia

US Bureau of Land Management - Carlsbad

### 12. CERTIA 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.

May 18, 1990

Date

For W.H. Cravey

W.H. Cravey Production Superintendent Mewbourne Oil Company

### 10. OTHER 1. 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:

Oueen	1260'	Cisco	<b>7</b> 740 <b>'</b>
San Anres	2100'	Canyon	8350 <b>'</b>
Glorieta	3720 <b>'</b>	Strawn	8900 <b>'</b>
Tubb	4930'	Atoka	95001
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 environmental 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:

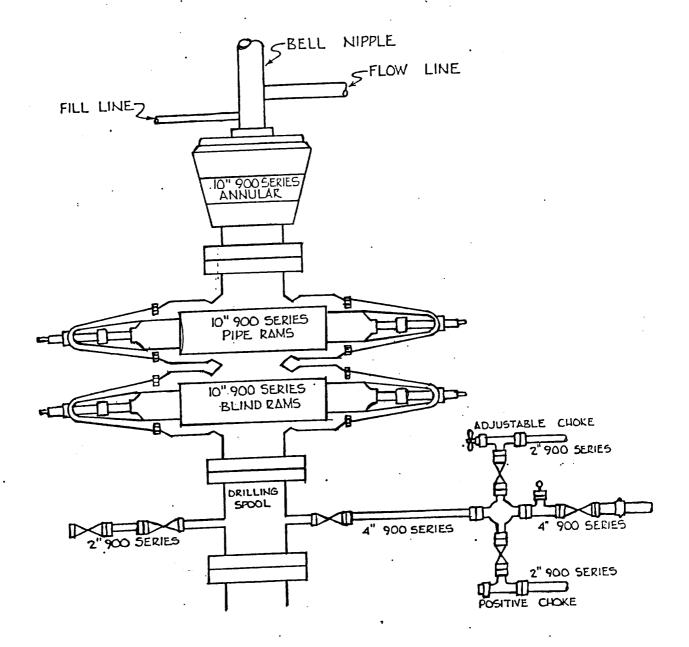
A. Existing wells in a 1 mile radius are shown of Exhibit "B".

### 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

### State of New Mexico nergy, Minerals and Natural Resources Depar

Form C-102 Revised 1-1-89

# OIL CONSERVATION DIVISION RECEIVED P.O. Box 2088

Santa Fe, New Mexico 87504-2088

nt

O. C. D. OFFICE

DISTRICT 1 P.O. Box 1980, Hobbs, NM 88240 DISTRICT II P.O. Drawer DD, Artesia, NM \$8210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT All Distances must be from the outer boundaries of the section Well No.

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MEW	BOURNE OIL	COMPANY	FEDERAL	<u>t</u>	County	
Alex	Section	Township	Range		دها.	d <b>v</b>
A	12	18 South	27 E	ast N	MPM   EQ	ay
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SUBMIT IN IRIPLICATE\*

Form 3160-3 (November 1983)	UNIT	Artesic ED STATES	S III	8210 (Other rev	instruc erse si	tions on de)	Budget Bureau l Expires August		λ,
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24 For W.H. Cra		<i>.</i>							

Del Vierce District Superintendent DATE SIGNED (This space for Federal or State office use) APPROVAL DATE \_ Orig. Signad by Richard L. Manus APPROVED BY

CONDITION POROVALY SUBJECT TO

GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS

MSL-3785 Appr. 5-3-90

\*See Instructions On Reverse Side

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.

#### 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 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 tion 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 1: If the proposal is to redrill to the same reservoir at a different subsurface loca-

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. or Federal office for specific instructions.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for

ITEM 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started. subsurface location of hole in any present or objective production zone.

### NOTICE

nished the following information in connection with information required by this applica-The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be fur-

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.

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. 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 ROUTINE USES: (1) The analysis of the applicant's proposal to discover and extract

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

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

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

tions on an oil and gas lease. Response to this request is mandatory only if the lessee elects to initiate drilling opera-This information will be used to analyze and approve applications.

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TEST WATER SHUT-OF FRACTURE TREAT SHOOT OR ACIDIZE. HEPAIR WELL. (Other)  17. DESCRIBE PROPOSED OR Proposed work. If Healt to this work.) **  6/29/90 - Sp.  Ra Wi Ce Co fo at	MICHIER CONFIDERATIONS (Clearly well is directionally drilled, give oud at 12:15 PM 6 at 15 joints 13-3 at 100 sxs of C1 closeal + 5#/Sx ontaining 6% gel collowed by 150 sx 6:12 AM 6/29/90	State all pertinent deta subsurface locations a 5/28/90. 5/8" 68# New ass "C" Thi Gilsonite f + 1/2# Cell as of Class Circulat	WATER SHUT-OFF  FRACTUBE TREATMENT SHOOTING OR ACIDIZING  (Other)  (Note: Report result Completion or Record  Ils. and give pertinent dates and measured and true vertic  LT&C Casing s xad containing ollowed by 200 oseal + 5#/sx.  "C" Neet + 3% ed 50 sxs of co	et at 472 cemented  3% CaCl <sub>2</sub> + 1/2#/sx sxs of Class "C" Gilsonite + 3% CaCl <sub>2</sub> CaCl <sub>2</sub> . Plug down ement. Insert float
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### \*See Instructions on Reverse Side

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### \*See Instructions on Reverse Side

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3.			Indicate Nat	ure of Notice, Repor	rt, or Othe	er Data		
	NOTICE OF INT	ENTION TO:			BUBBEQUENT	EEPORT OF:		
TEST WATER SH	UT-OFF	PULL OR ALTER CASING	1	WATER SHUT-OFF		REPAIRING	WELL	
FRACTUBE TREAT	[	MULTIPLE COMPLETE		FRACTUBE TREATMEN		ALTERING	CASING	
REPAIR WELL	Z.E.	ABANDON* CHANGE PLANS		SHOOTING OR ACIDIZE	ING X	ABANDONM	ENT*	
(Other)	bonomi d			(NOTE: Report	results of	multiple completion n Report and Log for	on Well	
7. DESCRIBE PROPOS	ED OR COMPLETED O	PERATIONS (Clearly stat	e all pertinent d	etails, and give pertinen s and measured and true	t dates, incl	uding estimated de	orm.) te of starting an	 V
nent to this wo	ork.) •	cionany drined, give su	Dauriace location	s and measured and true	e vertical de	pths for all marke	rs and zones pert	ſ-
/1//00 -	Dorforsto	Monnou 10	008-0141	, 12 holes;	10 070	0541 76	halaa	
		noles 24'.	000-014	, 12 notes,	10,030	-034 , 30	noies.	
		_	C -	:+1 2000 -	7 . 71 0	W C1 D		
				with 2000 ga rrying 96 ba				
	with 23 hl	ols 2% KCL w	ater con	taining 1000	SCE/R	h1 N P	ressured	
	casing to	1000#. Had	good bal	1 action. IS	DP 505	0#.In 5 m	ins	
	4580#,In	10 mins, 430	Ō#, In 1	5 mins, 4130	#。Max	6000# . Ma	ax Rate	
	3.7 BPM. A	Avg 5850#. A	vg Rate	3.4 BPM. 71	Bbls 1	oad to red	cover.	
/26/00	II. 112 b	C		C			V.C.I.	
/20/90 -	+ 87 tons	on fracia Mo	rrow per	fs with 8900	gals	gelled 2%	KCL wate	r
	to 2000#	ISDP <sup>2</sup> 5340#	In 5	500# 20/40 I mins 5080#,	in 10	mins $4950$	f in 15	ulu
1	mins 4850#	* Avg 9500#	. Avg ra	te 6 BPM. Ma	x 9800	#. Max rat	te 6.7 BP	Μ.
	211 bbls 1	load to reco	ver.					
					Ad			
				•		-		
		_						
I herebs carefes	that the foregoing	01						
Th.	To loregoing		/	0 0			100100	
SIGNED	gu ne str	myma	ITLE Engr	. Oprns. Sec	retary	DATE 10	02/90	
(This space for F	rederal or State off	ice yese)	A STATE OF THE STA					:
APPROVED BY		т	ITLE			DATE		
	APPROVAL, IF	ANY:				DATE		

### \*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.



### DRILLING CO., INC. - OIL WELL DRILLING CONTRACTORS

505/623-5070

P. D. BOX 1498 ROSWELL, NEW MEXICO 88202-1498 505/746-2719

ROSWELL, NM

LECEIVEU

JAN 3 1 1991

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.

840' 1380' 1759' 2253' 2589' 3068'	- ¼° - ¼° - ½°	$4062' - \frac{1}{2}^{\circ}$ $4560' - \frac{1}{2}^{\circ}$ $5048' - 0^{\circ}$ $5546' - 3/4^{\circ}$ $5950' - 1\frac{1}{4}^{\circ}$ $6479' - 3 3/4^{\circ}$ $6564' - 4\frac{1}{2}^{\circ}$	$6841' - 3\frac{1}{4}°$ $6934' - 3\frac{1}{2}°$ $7026' - 2 3/4°$ $7148' - 2 3/4°$ $7272' - 2°$ $8137' - 2 °$ $8815' - 2 °$
3068' 3567'	.=	6564' - 4½° 6626' - 4½°	8815' - 2° 9470' - 1 3/4°
3331	4		10141' - TD

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

SHIPPED AUG 3 1 1990

	l. UK bally										
Form 3160-4 P. O (November 1983) (formerly 9-330)	i. Box 11 30 I <mark>cs, New-M</mark>	ÜÑITÊD	CON		- NTstatir	' IN	DUPLICAT			Bure	ed. eu No. 1004-0137 ust 31, 1985
(totaletty ) eee,	DEPART	TMENT O	F THE	INT	<b>TERIOR</b>		structi	ns on	5. LEASE DES	SIGNAT	IUN AND SERIAL NO.
	BUI	REAU OF LAN	ID MANAG	EME	٧T			l	NM-42		
WELL CO	MPLETION	OR RECO	MPLETIC	)N R	EPORT 2	YN	LQG	*	6. IF INDIAN	ALLO	TTEE OR TRIBE NAME
1a. TYPE OF WEL	L: OIL WEI	AL GAS WELL C	X DRY		W. Sacro		4	_	7. UNIT AGRE	EMEN	r NaMB
b. TYPE OF COME	PLETION: WORK DEF	P. D PUPG DACK	DIFF. RESVR.	$\neg I$	Other	11	VED		S. FARM OR		
2. NAME OF OPERAT		/		1	007	3.3	) .	=	FEDER	AL_	uTu
Mewbourne		npany V		-		0 )	' 199 <u>0                                   </u>				
P. O. BOX	x 7698. T	Tyler, Te	xas 757	11\	C DYST. S				10, FIELD AN	D P00	L, OR WILDCAT
4. LOCATION OF WEL	L (Report locati	on clearly and in	accorderect	j#rqni	Segle require	ment	<del>*).*</del>	1	North	1111	nois Camp Morr
4. LOCATION OF WELL At surface 60	60' FNL 8	990' FE	L KECEN	100	1030 M		628100		11. SEC., T.,	R., M.,	ON BLOCK AND BURVEY
At top prod. into	erval reported be	low	SEP 2	4 199	31		410)		12-18		
At total depth	Same		_ O. C	. D.							
			ARTESTAM	_	- ·-	ATE	ISSUED		12. COUNTY	O <b>R</b>	13. STATE
5. DATE SPUDDED	I IS DATE TO S	EACHED   17. DAT	API #3	00-01	5-26404	PIDE	ATIONS (OF	. нки -	Eddy	19.	ELEV. CASINGHEAD
6/28/90	8/25/9		9/13/						632', G		
20. TOTAL DEPTH, MD	A TVD   21. PLU	IG, BACK T.D., MD &	TVD 22.	F MUL	TIPLE COMPL.,	,	23. INTER		ROTARY TOO		CABLE TOOLS
10,141 tes		10,100'	'	100 31	W. 1.	. '		<b>&gt;</b>	X		
4. PRODUCING INTER	IVAL(S), OF THIS	COMPLETION-TO	P, BOTTOM, N.	AME (N	AD AND TVD)*					2	5. WAS DIRECTIONAL SURVEY MADE
10,008-0	54' Morro	w					sh,		· .		Yes
6. TYPE ELECTRIC A					v	-	11.33			27. \	NO NO
S. CABING SIZE	WEIGHT, LB.				ort all strings	set in		ENTING	RECORD		AMOUNT PULLED
13-3/8"	68#	, <u> </u>	472		'-1/2"	4	50 sac	·ks	- Circ		None
8-5/8"	32#		25891		$\frac{1/2}{2-1/4}$				- Circ		None
5-1/2"	17#		94731		7/8"				- Circ		None
29.		LINER RECORE	<del></del>				30.		UBING REC		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEM	ENT*	SCREEN (MI	)	2-3/8		9842°	(D)	PACKER SET (MD)
4''	9055'	10,141'	80			-	2-3/6		9042		0000
1. PERFORATION REG	CORD (Interval, s	ize and number)			82.	AC	ID, SHOT,	FRACT	URE, CEMEN	T SQL	JEEZE, ETC.
10 008-0	141 12 1	holes)			DEPTH INT	ERVAL	(MD)	AM	OUNT AND KI	ND OF	MATERIAL USED
10,008-0 10,038-0	54, 36	holes) 24	1		10,008-	054					id. Frac'd w/
10,000	. <b>,</b>										wtr + 87 tons
								CO <sub>2</sub> +	11,500#	20,	/40 Interprop.
13.•		<del></del>	<del></del>	PRO	DUCTION		l				
ATE FIRST PRODUCT	ION   PROD	UCTION METHOD (	Flowing, gas			and t	ype of pum	p)			8 (Producing or
9/15/90			Flow	ing						ut-in)  t - i	n WOPL
ATE OF TEST	HOURS TESTED		TEST PI		OIL-BBL.		GAS-MC	F.	WATER—BB	L.	GAS-OIL RATIO
LO/03/90	24 hrs.	34/64"		<del>-&gt;</del>	1 BC		923		2		923:1
	O#	RE CALCULATED 24-HOUR RA			GAS-1	мс <b>г.</b> 23	i i	WATER-	-m81.,		8.00
160# 34. disposition of G		r fuel, vented, etc.			1 3,		l		TEST WITNE		
Vented 35. LIST OF ATTACH	MENTO				·				Eric	Ne1	son
Logs	r: ±11 1 0										
36. I hereby pertity	that the forego	ing)and attached	information i	ls comp	plete and corre	ect as	determine	d from	all available	record	8
SIGNE	dred V	mhox		1	Engr. O <sub>l</sub>						10/25/90
SIUNABI	7		1111			<del></del>			DAT		

Fitle 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 and Spaces for Additional Data on Reverse Side)

		Э.Б	TRUE VERT. DEPTH		**							• •	1.								
GEOLOGIC MARKERS		TOP	MEAS, DEPTH	4761	1218	1572	4824	6016	6716	7682	8912	9513'	96281	08781	0 4 0	15966	10104				
38.		N A M G	NAME	Yates	Queen	Grayburg San Andmas	Jan Andres Tubb	Abo	Wolfcamp	Cisco	Strawn	Atoka	Morrow	Morrow	: ر ۲	Lower Morrow	Barnett			-	
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	ARE PRINCENCY NOTIFICATION	DESCRIPTION, CONTENTS, ETC.	Sandstone	Sandstone	Sandstone	Sandstone			ushion. Tool open 30 m		00 drilling	shion.	72-37#	ပို	drilli						
now all important terval tested, cus	MOTTOR	WO I TOW	1556	95751	99281	10054			58501			64991									
ROUS ZONES: (St	TOP		1522'	95661	9902	10008			5749			6475									
37. SUMMARY OF POF	recoveries): FORMATION	NOT VIEW C	Penrose	Atoka	Middle Morrow	Lower	Morrow	DST .#1	Drinkard			DST #2	Abo								

# Submit 5 Copies Appropriate District Office DISTRICT 1 P.O. Box 1980, Hobbs, NM 88240

### State of New Mexico Energy, Minerals and Natural Resources Department

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

DISTRICT II O. Drawer DD, Artesia, NM 88210	C		NSERVA P.O. Bo Fe, New Mo	x 2088			MCEIVE		-
DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410	DEOLU		ALLOWAE				IE nal	1941	
•			PORT OIL			10	O. C.	D.	
Operator Mewbourne Oil	Compan	у /				30 -	015-264	04	
Address	- <del></del>	<u></u>	7 7 7 7 1 1		<del></del>		<u></u>		
P. O. Box 7698  Reason(s) for Filing (Check proper box)	, lyle	r, lexa	15 /5/11		er (Please explo	rin)			
New Well		Change in Tra	asporter of:	_	•	•			
Recompletion	Oil Casinghead	∐ Dry Gas ∏ Cor	Gas 🗀						
f change of operator give name									· · · · · ·
nd address of previous operator	ANDIEA	CE							
I. DESCRIPTION OF WELL . Lease Name			Name, Includi	ng Formation			of Lease		se No.
FEDERAL "T"		1 No.	rth Illir	nois Cam	o Morrow	X AND X	Federal or Fee	x NM-4	2410
Location Unit LetterA	.՝ 66	0 Fee	t From TheN	North Lin	and 99	<u>0</u> Fe	et From The	East	Line
Section 12 Township	, 18S	Rai	275		ирм.		Edd	y	County
II. DESIGNATION OF TRAN									
Name of Authorized Transporter of Oil Amoco Pipeline Inter-		or Condensate		Address (Giv			copy of this for 2068, Tuls		
Corporate Trucking Name of Authorized Transporter of Casing	ghead Gas	or l	Dry Gas X				copy of this fo		
Transwestern Pipeline	Company						ı, Texas	77251-1	188
If well produces oil or liquids,	Unit	Sec.   Tw	<b>p.   Rge.</b> .8S   27E	Is gas actuall No	y connected?	When	_	ry, 199	1
f this production is commingled with that					ber: No		Tebrua	11 y , 133	<u>+</u>
V. COMPLETION DATA		Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Designate Type of Completion		<u>i</u>	X	X	İ	<u>i</u>	نــــــــــــــــــــــــــــــــــــــ		İ
Date Spudded 6/28/90	1	l. <b>Ready to Pro</b> 13/90	<b>d</b> .	Total Depth	10,1	41'	P.B.T.D.	10,100	
Elevations (DF, RKB, RT, GR, etc.)	<del>+                                    </del>	oducing Forma	tion	Top Oil/Gas			Tubing Depth		
DF 3632', GL 3618'	Morro	W			10,0	081		9,842	
Perforations 10,008-054							Depth Casing	Shoe	
	,		SING AND	CEMENTI			······		
HOLE SIZE	CAS	ING & TUBIN	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		DEPTH SET		S	ACKS CEME	NT
17-1/2"		13-3/8 8-5/8	3 *		472 2589		ļ	<u>450</u> 900	
7-7/8"	<b>-</b>		211		9473		<del> </del>	430	
5-1/2"		۲۳ Line			10140			80	
V. TEST DATA AND REQUES OIL WELL (Test must be after re				be equal to or	exceed top allo	owable for thi	s depth or be fo	or full 24 hour	s.)
Date First New Oil Run To Tank	Date of Test	l		Producing Me	thod (Flow, pu	ımp, gas lift, e	etc.)	Part	エリーク
Length of Test	Tubing Pres	sure		Casing Press.	ire		Choke Size	3-15	-9/1
Actual Prod. During Test	Oil - Bbls.			Water - Bbls.			Gas- MCF	comp	¥ KI K
GAS WELL	1			I			1		
Actual Prod. Test - MCF/D	Length of T			Bbls. Conden	_	<del></del>	Gravity of Co	ondensate O	
923 Testing Method (pitot, back pr.)	1	4 hours		Casing Pressa	l um (Shut-in)	<del> </del>	5 8 Choke Size		
Back Pressure	1 -	300#		Contract took	(wiw-111)			/64"	·· · · · · · · · · · · · · · · · · · ·
VI. OPERATOR CERTIFIC.  I hereby certify that the rules and regula					OIL CON	ISERV	ATION E	DIVISIO	N
Division have been complied with and is true and complete to the best of my b	that the inform	nation given at					MAR 1 2		
is the aim complete to the best of my	morreuge and	J ochel.		Date	Approve	d	TIME T &	1301	

Oprns.Sec.

Thompson,

Engr.

1 / 20 / 01	. (0.07)	1 ME	Ш	Title	SUPERVISOR, DISTRICT II
1/28/91	[ [ 903 ]	561 <b>-</b> 2900	- 11		
Date		Telephone No.	- 11		

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.
- Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
   Separate Form C-104 must be filed for each pool in multiply completed wells.

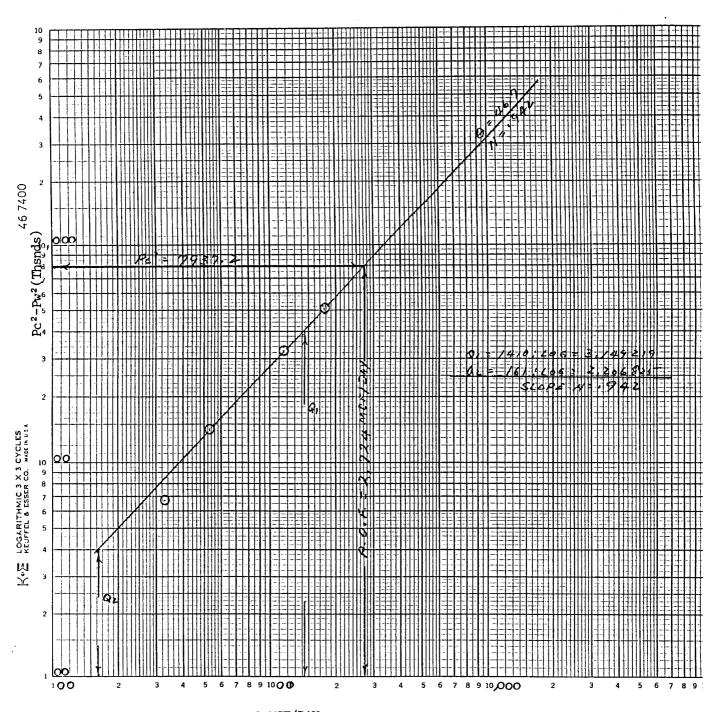
### OIL CONSERVATION DIVIDIO

STATE OF NEW MEXICO STATE OF NEW MEXICO P. O. BO X 2088
ENERGY AND MINERALS DEPARTMENT SANTA FE, NEW MEXICO 87501

### MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Typ	e Test									Test D	-19					
"		] Initio	al			innual	•	☐ Sp	ecial	10-1	1-90	(	1. 0. 1	D		
Con	PENY	`				Connecti	oa -					437	i A. 27	FICE -		
Me	wbourne	Oil	Compa	ıny		J		Ven	ted				<u> </u>			
Peo		,				Formatio	A						Uait	A		
No	th Ill	inoi		mp Mor	row	<u>'</u>		rrow						Legse	••••	
	pietlan Date		ı	Tolal Capin		_	Plug Bac			Elevation		•		_		•
r	09-13-9				1014		Perloran	10100		3634	KB		Well No	dera.	T T	
	Size	₩I.	- 1	4	Sat		From 7		Te	1/	054				1	·
	" Sixe	<u> 10</u>	.46	4	Sel	0141	Pertorati			10	W)4		Unit	Sec.	7.	p. Rye.
	3/8		4.7			9842	From	OPEN	T	• I	ND		Α	12	18	3S 27E
				_G.G. of G.	O. Mu	itipie		Pactor S					County			
``	Sin							1	8	8888				Ede	dy	
F'rod	ucing Thru		Reserv	ou Temp. °F		Mean Annu	al Temp. 'F	Baro. Pr	***	P <sub>a</sub>	_		State			
T	3G		174	• 10031		60		<u> </u>			13.		1	Vew M		
	L	Н		C4		% CO 2	* N 3		7 H2S	Ī	Prov	• .	Meter		1	ops Til
10	0031	100		.65		2.29	3	.39			L			.067	┵,	Flg.
			FL	ATAO WO	<u> </u>		<del></del>	<del></del>		DATA			ASING			Duration
NO.	Prover Line	x	Orifice Size	Press.	-	Diff.	Temp.	Pres p.s.i		Tom			i.q.	Tem	1	ol Flow
	Size		3184	p			<del></del>	274		<del> </del>			KR			72 hrs
SI	2 V	1 0	250	67	-	12.96	56	2590		-			KR			1 hr.
1.	2 X 2 X		250 250	167		14.44		2470					KR			l hr.
2. 3.	2 X	$\frac{1.2}{1.2}$		179		65.61		2110		1	.		KR			1 hr.
4.	$\frac{2}{2}$ X	$\frac{1.2}{1.2}$		299	$\dashv$	94.09		1630		<del>                                     </del>			KR			1 hr.
5.	<u> 2 A</u>	<u> </u>	.,,,,		$\neg \vdash$		<del>                                     </del>			1						
			<u></u>			RATE	OF FLOW	CALCU	LATI	ONS						
1 1							57	w Temp.	T	Gravity	,		Super		Rate	of Flow
	Coeffic		_	√h,,P <sub>m</sub>	•	Pressur	FIG	rw Temp. Fector		Gravity	,	c	mpress.	:		e of Flow
NO.	(24 He	our)	_		•	Preseur	. FIG	rw Tamp. Factor F1.		Gravity Factor Fq		Co Foo	mpress. nor, Fpv		Q	, Meld
- 8	(24 He	.0		32.24	•	Preseure Preseure 80.2	Flo	Factor F1.		Gravity Factor Fg	5	Co Foo	mpredu. nor, Fpv		32	8
1 2.	8.12 8.12	20 20	-	32.24 51.01	-	Preseure 80.2 180.2	Fid	Focior F1. .004		Foctor Fq 1.23	5 5	1 1	.010 .020		32 52	9. Mald 8 7
1 2. 3.	8.12 8.12 8.12	20 20 20		32.24 51.01 112.30		80.2 180.2 192.2	FIG	Foctor F1. .004 .010		Gravity Factor Fq 1.23 1.23	5 5 5	1 1 1	.010 .020 .021		32 52 116	8 7 5
1 2. 3.	8.12 8.12	20 20 20		32.24 51.01	•	Preseure 80.2 180.2	FIG	Focior F1. .004		Foctor Fq 1.23	5 5 5	1 1 1	.010 .020		32 52	8 7 5
1 2. 3.	8.12 8.12 8.12	20 20 20		32.24 51.01 112.30	•	80.2 180.2 192.2 312.2	Flo	Foctor F1004 .010 .013		1.23 1.23 1.23	5 5 5	1 1 1 1	.010 .020 .021		32 52 116	8 7 5
1 2. 3.	8.12 8.12 8.12	20 20 20		32.24 51.01 112.30		Pressure 80.2 180.2 192.2 312.2	Flo	Foctor F1	Ratio	Gravity Foctor Fq 1.23 1.23 1.23	5 5 5 61.2	1 1 1 1	.010 .020 .021 .036		32 52 116	8 7 5 1
1 2. 3. 4. 5.	8.12 8.12 8.12 8.12	20 20 20 20 20	p. *R	32.24 51.01 112.30 171.39		80.2 180.2 192.2 312.2	Flo	Factor Ft	Ratio	Gravity Foctor F9 1.23 1.23 1.23 1.23	5 5 5 61.2	1 1 1 1	.010 .020 .021		32 52 116 179	8 7 5 1
1 2. 3. 4. 5. NO.	8.12 8.12 8.12 8.12 8.12	20 20 20 20 Temp	<b>pR</b>	32.24 51.01 112.30 171.39 7		80.2 180.2 192.2 312.2	Flo	Factor F1004 .010 .013 .006	Ratio Hydroc or Gas	Foctor Fq 1.23 1.23 1.23 1.23	5 5 5 61.2	Co   Feet   1   1   1   1   1   0   0   0   0   0   0   0   0   0   0	.010 .020 .021 .036		32 52 116 179	8 7 5 1
1 2. 3. 4. 5. NO.	8.12 8.12 8.12 8.12 8.12	20 20 20 20 20 Temp	16 10	32.24 51.01 112.30 171.39 7 1.38 1.37		80.2 180.2 192.2 312.2 z Ga 981 Sp 962 Sp	Flo	Factor Fi004 .010 .013 .006  ydrocarbon y of Liquid ity Separati	Ratio Hydrocor Gas	Gravity Factor Fq 1.23 1.23 1.23 1.23	5 5 5 61.2	1 1 1 1	.010 .020 .021 .036	. x	32 52 116 179	8 7 5 1
1 2. 3. 4. 5. NO.	8.12 8.12 8.12 8.12 8.12	20 20 20 20 20 51 51 51	<b>pR</b>	32.24 51.01 112.30 171.39 7	•	80.2 180.2 192.2 312.2 z G-A 981 962 959 C-	Flo	Factor Fi004 .010 .013 .006  ydrocarbon y of Liquid tity Separati	Ratio Hydrocor Gas 7 Fluid *67	Gravity Factor Fq 1.23 1.23 1.23 1.23	5 5 5 61.2	Co   Feet   1   1   1   1   1   0   0   0   0   0   0   0   0   0   0	.010 .020 .021 .036	. x	32 52 116 179	8 7 5 1
1 2. 3. 4. 5. NO. 1. 2. 3. 4. 5.	8.12 8.12 8.12 8.12 8.12 8.12 8.12 8.12	20 20 20 20 20 51 51 51	1R 1.6 10 0.7 14	32.24 51.01 112.30 171.39 7, 1.38 1.37 1.36 1.38	•	80.2 180.2 192.2 312.2 z G-A 981 962 959 C-	Floring Floring Gravity octific Gravity octific Gravity octific Gravity octific Gravity octifical Presentation of the Control of the Control octifical Presentation of the Control octifical Presentation of the Control octifical Presentation of the Control octifical Presentation of the Control octification	Factor Fi004 .010 .013 .006  ydrocarbon y of Liquid tity Separati	Ratio Hydrocor Gas 7 Fluid *67	Gravity Factor Fq 1.23 1.23 1.23 1.23	5 5 5 61.2	Co   Feet   1   1   1   1   1   0   0   0   0   0   0   0   0   0   0	.010 .020 .021 .036	. x	32 52 116 179	8 7 5 1
1 2. 3. 4. 5. NO. 1. 2. 3. 4. 5.	8.12 8.12 8.12 8.12 8.12 8.12 8.26 .28 .46	20 20 20 20 53 55 55 56	16 10 07 14	32.24 51.01 112.30 171.39 7, 1.38 1.37 1.36 1.38		80.2 180.2 192.2 312.2 z GA 981 962 959 GG 932 GG	Floring State of the Control of the	Factor Fi004 .010 .013 .006  ydrocarbon y of Liquid tity Separati tity Flowing ture erature	Ratio Hydrocor Gas 7 Fluid *67	1.23 1.23 1.23 1.23	5 5 5 61.2 656 x	Co   Free   1   1   1   1   1   2   58.0	.010 .020 .021 .036	- X )	32 52 116 179	8 7 5 1
1 2. 3. 4. 5. NO. 1. 2. 3. 4. 5. Pc.	8.12 8.12 8.12 8.12 8.12 8.12 8.12 8.12	20 20 20 20 Tong 51 51 51 51 51	16 10 07 14 7937	32.24 51.01 112.30 171.39 7 1.38 1.37 1.36 1.38		80.2 180.2 192.2 312.2 2 Ga A. 5g 981 962 959 932 Ga	Floring State of the Control of the	Factor Fi004 .010 .013 .006  ydrocarbon y of Liquid tity Separati tity Flowing ture erature	Ratio Hydrocor Gas 7 Fluid *67	1.23 1.23 1.23 1.23	5 5 5 61.2 656 x	Co   Free   1   1   1   1   1   2   58.0	.010 .020 .021 .036	- X )	32 52 116 179	8 7 5 1
1 2. 3. 4. 5. NO. 1. 2. 3. 1 4. 5. Pc. NO! 1	8.12 8.12 8.12 8.12 8.12 8.12 8.26 .28 .46	20 20 20 20 53 55 55 56	16 10 07 14 7937	32.24 51.01 112.30 171.39 7 1.38 1.37 1.36 1.38 2 8,2 7269.5	e.1.	80.2 180.2 192.2 312.2 2 2 GA 981 962 959 932 Ca - R. <sup>2</sup> (1	Floring Floring Gravity octific Gravity octific Gravity octific Gravity octific Gravity octifical Presentation of the Control of the Control octifical Presentation of the Control octifical Presentation of the Control octifical Presentation of the Control octifical Presentation of the Control octification	Factor Fi004 .010 .013 .006  ydrocarbon y of Liquid tity Separati tity Flowing ture erature	Ratio Hydrocor Gas 7 Fluid *67	1.23 1.23 1.23 1.23	5 5 5 61.2 656 x	Co   Free   1   1   1   1   1   2   58.0	.010 .020 .021 .036	- X )	32 52 116 179	8 7 5 1
1 2. 3. 4. 5. NO. 1. 2. 3. 4. 5. Pc. NO! 1 2 1 2	8.12 8.12 8.12 8.12 8.12 8.12 8.26 .28 .46	20 20 20 20 Tong 51 51 51 51 51	16 10 07 14 7937	32.24 51.01 112.30 171.39 T 1.38 1.37 1.36 1.38 .2 R <sup>1</sup> 7269.5 6532.1	e,16	80.2 180.2 192.2 312.2 z Ga A. 981 962 959 932 Ca	Floring Floring Floring Floring From Hiller From Hiller From Hiller Floring Fl	re Temp. Fector Ft004010013006  ydrocarbon r of Liquid ity Separati ity Flowing ity Flowing ity Flowing ity Flowing ity Flowing	Ratio Hydrocor Gas 7 Fluid *67	1.23 1.23 1.23 1.23 1.23	5 5 5 5 61.2 5 656 x	Co   Free   1   1   1   1   1   2   58.0	.010 .020 .021 .036	- X )	32 52 116 179	8 7 5 1
1 2. 3. 4. 5. NO. 1. 2. 3. 4. 5. Pc. NO 1 2 3	8.12 8.12 8.12 8.12 8.12 8.12 8.26 .28 .46	20 20 20 20 20 51 51 52 52 52 269 255 217	7937 7937 6.2 5.8 3.1	32.24 51.01 112.30 171.39 T 1.38 1.37 1.36 1.38 .2 R <sup>1</sup> 7269.5 6532.1 4722.4	6 14 32	80.2 180.2 192.2 312.2 2 2 2 312.2 2 2 312.2 2 67.7 05.1 14.8	Floring Floring Floring Floring From Hiller From Hiller From Hiller Floring Fl	re Temp. Fector Ft004010013006  ydrocarbon r of Liquid ity Separati ity Flowing ity Flowing ity Flowing ity Flowing ity Flowing	Ratio Hydrocor Gas 7 Fluid *67	1.23 1.23 1.23 1.23 1.23	5 5 5 5 61.2 5 656 x	Co   Free   1   1   1   1   1   2   58.0	.010 .020 .021 .036	- X )	32 52 116 179	8 7 5 1
1 2. 3. 4. 5. NO. 1. 2. 3. 4. 5. Pc. NO 1 2 3 4	8.12 8.12 8.12 8.12 8.12 8.12 8.26 .28 .46	20 20 20 20 Tong 51 51 51 51 51	7937 7937 6.2 5.8 3.1	32.24 51.01 112.30 171.39 T 1.38 1.37 1.36 1.38 .2 R <sup>1</sup> 7269.5 6532.1	6 14 32	80.2 180.2 192.2 312.2 z Ga A. 981 962 959 932 Ca	Floring State of the Control of the	re Temp. Fector Ft004010013006  ydrocarbon r of Liquid ity Separati ity Flowing ity Flowing ity Flowing ity Flowing ity Flowing	Ratio Hydrocor Gas 7 Fluid *67	1.23 1.23 1.23 1.23 1.23	5 5 5 5 61.2 5 656 x	Co   Free   1   1   1   1   1   2   58.0	.010 .020 .021 .036	- X )	32 52 116 179	8 7 5 1
1 2. 3. 4. 5. NO. 1. 2. 3. 4. 5. Pc. NO 1 2 3 4	8.12 8.12 8.12 8.12 8.12 8.12 8.26 .28 .46	20 20 20 20 20 51 51 52 52 52 269 255 217	7937 	32.24 51.01 112.30 171.39 Tr 1.38 1.37 1.36 1.38 1.37 1.36 1.38 1.37 1.36 1.38	6 14 32	80.2 180.2 192.2 312.2 2 2 2 312.2 2 2 312.2 2 67.7 05.1 14.8	Floring Floring Floring Floring From Hiller From Hiller From Hiller Floring Fl	re Temp. Fector Ft004010013006  ydrocarbon r of Liquid ity Separati ity Flowing ity Flowing ity Flowing ity Flowing ity Flowing	Ratio Hydrocor Gas 7 Fluid *67	1.23 1.23 1.23 1.23 1.23	5 5 5 5 61.2 5 656 x	Co   Feet   1   1   1   1   1   1   2   58.0   (2)	.010 .020 .021 .036 @ 60°	A. R	32 52 116 179	8
1 2. 3. 4. 5. NO. 1. 2. 3. 4. 5. Pc. NO! 1 2 1 3 4 5 5	8.12 8.12 8.12 8.12 8.12 8.12 8.26 .28 .46	20 20 20 20 20 51 51 52 52 52 269 255 217 168	7937 	32.24 51.01 112.30 171.39 T 1.38 1.37 1.36 1.38 .2 R <sup>1</sup> 7269.5 6532.1 4722.4	6 14 32	80.2 180.2 192.2 312.2 2 2 2 312.2 2 2 312.2 2 67.7 05.1 14.8	Figure H. J. Graviti- ectific Grav ectific Grav ectifical Pres- etifical Temp	re Temp. Fector Ft004010013006  ydrocarbon r of Liquid ity Separati ity Flowing ity Flowing ity Flowing ity Flowing ity Flowing	Ratio Hydrocor Gas *67.	1.23 1.23 1.23 1.23 1.23	5 5 5 5 61.2 5 656 x	Co   Feet   1	.010 .020 .021 .036	A. R	32 52 116 179	8 7 5 1
1 2. 3. 4. 5. NO. 1. 2. 3. 4. 5. Pc. NO! 1 2 1 3 4 5 5	8.12 8.12 8.12 8.12 8.12 8.12 .26 .28 .46	20 20 20 20 20 20 20 20 20 20 20 20 20 2	7937 14 7937 6.2 5.8 3.1	32.24 51.01 112.30 171.39 Tr 1.38 1.37 1.36 1.38 1.37 1.36 1.38 1.37 1.36 1.38	6 14 32 50	80.2 180.2 192.2 312.2 2 2 G.A. 981 Sp 962 Sp 932 C.G. 67.7 05.1 14.8 83.8	Figure H. J. Gravities Gravitical Presentical Temporary P. J. P. J	rw Temp. Factor F1004010013006013006	Ratio Hydrocor Gas *67.	1.23 1.23 1.23 1.23 1.23 1.23	5 5 5 5 61.2 5 656 x	Co   Feet   1	.010 .020 .021 .036 @ 60°	A. R	32 52 116 179	8
1 2. 3. 4. 5. NO. 1. 2. 3. 4. 5. Pc. NO! 1 2 1 3 4 5 5	8.12 8.12 8.12 8.12 8.12 	20 20 20 20 20 20 20 20 20 20 20 20 20 2	7937 6.2 5.8 3.1 9.2	32.24 51.01 112.30 171.39 T 1.38 1.37 1.36 1.38 1.37 1.36 1.38 2.724 2.724 2.724 2.724	6 14 32 50	80.2 180.2 192.2 312.2 z A. 981 Sp 962 Sp 979 Sp 970 S	Figure H. J. Gravities Gravitical Presentical Temporary P. J. P. J	re Temp. Factor Ft004 .010 .013 .006  verocarbon of Liquid tity Separati tity Flowing tity Fl	Ratio Hydrocor Gas Fluid *67	1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23	5 5 5 5 61.2 5 656 x	Co   Feet   1   1   1   1   1   1   58.0   (2)	.010 .020 .021 .036 .036 .06.7	A. R	32 52 116 179	8
1 2. 3. 4. 5. NO. 1. 2. 3. 4. 5. Pc. NO! 1 2 1 3 4 5 5	8.12 8.12 8.12 8.12 8.12 	20 20 20 20 20 20 20 25 51 52 52 269 255 217 168	7937 6.2 5.8 3.1 9.2	32.24 51.01 112.30 171.39 T 1.38 1.37 1.36 1.38 1.37 1.36 1.38 2.724 2.724 2.724 2.724	6 14 32 50	80.2 180.2 192.2 312.2 z A. 981 Sp 962 Sp 979 Sp 970 S	Figure H. Gravition of the control o	re Temp. Factor Ft004 .010 .013 .006  verocarbon of Liquid tity Separati tity Flowing tity Fl	Ratio Hydrocor Gas #67	1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23	5 5 5 5 61.2 5 656 x	Co   Feet   1   1   1   1   1   1   58.0   (2)	.010 .020 .021 .036 .036 .06.7	A. R	32 52 116 179	8

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



Q MCF/DAY

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

### OIL CONSERVATION DIVISION

— Submit 5 Copies Appropriate District Office DISTRICT I	nergy, N	State of Notinerals and Nati	ew Mexico ural Resource	es Depar.	ınt			C-104 i 1-1-89 tructions
P.O. Box 1980, Hobbs, NM 88240	OIL C	ONSERVA	TION D	IVISIO	N			om of Page
DISTRICT II P.O. Drawer DD, Antesia, NM 88210	Sa.	P.O. Bo nta Fe, New Mo	ox 2088 exico 8750	1-2088			6	151
DISTRICT III 1000 Rio Brazos Rd., Azzec, NM 87410	REQUEST FO	•			ZATION			1, P. (1) V
	TOTRA	NSPORT OIL	AND NAT	URAL GA		BI ST		7
Operator					Well A	API No.	F 26404	
Mewbourne Oil Con			alleria w w w v		-	30-01	<u>526404</u>	
P.O. Box 5270 H Reason(s) for Filing (Check proper box)	obbs, New Mex	ico	Other	(Please explo	zin)			
New Well	Change in	Transporter of:						
Recompletion	Oil L	Dry Gas						
Change in Operator	Casinghead Gas	Condensate						
f change of operator give name and address of previous operator								
II. DESCRIPTION OF WELL	AND LEASE							
Lease Name	i	Pool Name, Includi	-		ZEZZESZ.	of Lease Federal <b>XXX</b>		ease No.
Federal "T"		North Illi	inois Cam	p Morro	W 23	I COCIAI VIZED	NM-	42410
Location Unit LetterA	:660	Feet From The	North Line	and	990 Fe	et From The	East	Line
Section 12 Townshi	p 18S	Range 27E	, NM	IPM,		Ed	ldy	County
III. DESIGNATION OF TRAN	SPORTER OF O	IL AND NATU	RAL GAS					
Name of Authorized Transporter of Oil Amoco Pipeline Inter-	or Conder		Address (Give					1
corporate Trucking Name of Authorized Transporter of Casin		- D- C- [77]						k 74170-20
		or Dry Gas X	Address (Give			• • • •		i i
Transwestern Pipeline If well produces oil or liquids,	Unit Sec.	Twp. Rge.			When		11231 1	100
give location of tanks.	I A I 12	18S 27E		es	(	02/07/91	<u></u>	
f this production is commingled with that IV. COMPLETION DATA						I nu nu t	Ic D. e'ii	Diff Res'v
Designate Type of Completion	- (X) Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back 	Same Res'v	Diff Resv
Date Spudded	Date Compl. Ready to	Prod.	Total Depth			P.B.T.D.		
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Fe	ormation	Top Oil/Gas P	ay		Tubing Dep	th	
Perforations			<u> </u>	<del></del>		Depth Casir	ng Shoe	
	TUBING,	CASING AND	CEMENTIN	IG RECOR	D			
HOLE SIZE	CASING & TI			DEPTH SET			SACKS CEM	IENT
V. TEST DATA AND REQUE	ST FOR ALLOW recovery of total volume	ABLE	4 h	evered top all	owable for the	is denth or he	for full 24 ho	urs)
OIL WELL (Test must be after  Date First New Oil Run To Tank	Date of Test	of toda ou and mus	Producing Me	thod (Flow, p	ump, gas lift,	etc.)	jor jazz <u>- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </u>	
Length of Test	Tubing Pressure		Casing Pressu	re		Choke Size		
Actual Prod. During Test	Oil - Bbls.	· · · · · · · · · · · · · · · · · · ·	Water - Bbls.			Gas- MCF		
GAS WELL						_ <b>!</b>		
Actual Prod. Test - MCF/D	Length of Test	<u></u>	Bbls. Conden	sate/MMCF		Gravity of	Condensate	
Testing Method (pitot, back pr.)	Tubing Pressure (Shu	t-in)	Casing Pressu	re (Shut-in)		Choke Size		
VI. OPERATOR CERTIFIC			(		NSERV	ATION	DIVISION	ON
I hereby certify that the rules and regu Division have been complied with and is true and complete to the best of my	that the information give	rvation ven above				MAR 1		
1 1 1/2	aver			Approve	#U	IIVIV T	- 1001	
Signature		a+ C+	∥ By_		NAL SIGN			
W.H. Crawey	Distric	ct Supt.	Tial a		WILLIAM RVISOR I		I <b>9</b>	

PTIMES INSING	•	II TILLE OUT ENTHOUSE, DIGITALS II
02/18/91	(505) 393-5905	
Date OZ/10/JI	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.



#### STATE OF NEW MEXICO

### **ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT**

**BRUCE KING** 

OIL CONSERVATION DIVISION ARTESIA DISTRICT OFFICE

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

Date: August 9, 1991

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

Wells placed in pools

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 District Geologist

Each Transporter Amoco Pipeline, Transwestern Santa Fe

Well File Joe Chism

BLM

# UNITED STATES AND APPROVED ELLIN Burgar No. 1004-003

	DEPARTMENT OF THE INTERIOR UREAU OF LAND NO.	125 44 M.A. 112 A. A.	Express March 31, 1953  f. Leuis Designation and Serial No.
Do not use this form for Di	Y NOTICES AND REPORTS ON opposals to drill or to deepen or ree	WELLS entry to a different reservoir.	NM-42410 6. If Indian, Allouce of Tribe Name
	SUBMIT IN TRIPLICATE	RECEIVED	7. If Unit or CA, Agreement Designation
1. Type of Well    X Oil   Gas   Other   2. Name of Operator   Och   Och		AUG - 2 1993	8. Well Name and No.  Federal "T" No. 1  9. API Well No.
Mewbourne 0il Com  3. Address and Telephone No.  P.O. Box 5270 Ho  4. Location of Well (Footage, Sec., T  660' FNL & 990' F  Sec. 12-T18S-R27E	bbs. New Mexico 88241 ( R., M., or Survey Description)	505) 393-5905	10. Field and Pool, or Exploratory Area  Canyon 11. County or Parish, State  Eddy Co., N.M.
12. CHECK APPROP	PRIATE BOX(s) TO INDICATE NA		RT, OR OTHER DATA
TYPE OF SUBMISS	ION	TYPE OF ACTION	
Notice of Intent  Subsequent Report  Final Abandonment 1	Recor Plugg Casin	ng Repair ing Casing	Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off  Conversion to Injection  Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
Describe Proposed or Completed Open give subsurface locations and me	rations (Clearly state all pertinent details, and give perti- casured and true vertical depths for all markers and z	inent dates, including estimated date of starting ones pertinent to this work.)*	
l. Plug back exist <sup>.</sup> Cap both plugs v	ing perforations (10,008'- with 50' cement.		
2. Perforate the C	isco formation @ 7700'-8050	0'.	OF LAND
3. Stimulate if neo	cessary.		SEE RECEIVED

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

14. I hereby certify that the longoing is true and correct		
	Title _ District Supt	Date July 14, 1993
(This space for Federal or State office (se)	Parimor	発着者と 2 1987が
Approved by ORIG. SGD.) DAVID R. GLASS	Petroleum Engineer	Date JUL 2 1940
Approved by 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.

	0CT = 6	<del>1993</del>
1. Type of Well Oil Gas Well Other	001 8	8. Well Name and No.
Well Well Other  2. Name of Operator	0.6	Federal "T" #1
Mewbourne Oil Company		9. API Well No.
3. Address and Telephone No.		30-015-26404
P.O. Box 5270 Hobbs, New Mex	ico 88241	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey De	escription)	North Illinois Camp Mor
660' FNL & 990' FEL		11. County or Parish, State
Sec. 12-T18S-R27E		Eddy Co. New Mexico
12 CHECK APPROPRIATE BOX(	s) TO INDICATE NATURE OF NOTICE,	
	TYPE OF	
TYPE OF SUBMISSION	ITPE OF	ACTION
Notice of Intent	Abandonment	Change of Plans
CV)	Recompletion	New Construction
X Subsequent Report	Plugging Back	☐ Non-Routine Fracturing ☐ Water Shut-Off
П	Casing Repair	Conversion to Injection
Final Abandonment Notice	Altering Casing	Dispose Water
	Other	(Note: Report results of multiple completion on Well
13. Describe Proposed or Completed Operations (Clearly state a	leastings details and give pertinent dates, including estimated d	Completion or Recompletion Report and Log form.)  ate of starting any proposed work. If well is directionally drilled.
13. Describe Proposed or Completed Operations (Clearly state a give subsurface locations and measured and true vertically).	al depths for all markers and zones pertinent to this work.)*	ne or starting any proposed month is more described.
* Verbal from Adam Salameh		
	1. 0 BO, 0 MCF from attempted c	ompletion in Cisco formation.
MIRU well service ri	g.	
08/15/93 Set CIBP @ 7595' ove	er Cisco Perfs (7685'-7695'). D	Oump 4 sx. cmt. on plug. Perf.
Wolfcamp formation	(7330'-7360') (44 H)	
08/16/93 Swabbed well down w	no entry.	Combbad vator w/no show of
	ormation w/3000 gal 15% FE acid.	2Mapped Mater Myllo 2110M O1
oil or gas.	er Wolfcamp formation (7330'-736	(a) Dump 4 sy cmt on plug
08/18/93 Set CIBP @ 7300' ove	nation (7092'-7146') (62H). Swa	bbed well down. No entry.
	ormation (7092'-7146') w/3000 ga	al 15% RF acid.
	now of oil or das	11. 10% ME dord!
	er Perfs (7092'-7146'). Perf'd	Wolfcamp (6868'-7038') (80H)
	ormation (6868'-7038') w/3000 ga	1. 15% FE acid.
00/24/03 Swabbing water w/tr	ace of oil.	
08/26/93 Acid frac'd Wolfcam	(6868'-7038') w/3000 gal. 20%	FE acid & 15,000 gal. gel water
See attached page.	(3232 ) , , ,	
14. I hereby certify the for going time and correct		
Signed New Hausse	Title Production Engineer	Date 09/08/93
	Title Production Engineer	
(This space for Federal or State office use)	A	ACCEPTED FOR RECORD
Approved by	Title	Jan I
Conditions of approval, if any:	1	January 1
		~(C) - 4 1993
Title 18 U.S.C. Section 1001, makes it a crime for any person	n knowingly and willfully to make to any department or agency	of the United States any false, fictitious or flaudulent statements
representations as to any matter within its jurisdiction.	*See Instruction on Reverse Side	ARLSBAD, NEW MEXICO
	- See Instruction on Meverse Side	

RECEIVED

Form 3160-5

(June 1990)

08/27/93 RIH w/pump & started pumping well. 08/28/93 0 B0 276 BW 8 MCF 09/03/93 5 B0 30 BW 5 MCF 09/05/93 2 B0 25 BW 4 MCF

June 1990) DEPARTMEN	red states MA OTL COMM. COMMENSION	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993
M 'Q3	LAND MANAGEMENTHE, ME SOULD	5. Lease Designation and Serial No.  NM-42410
Do not use this form for proposals to dr	AND REPORTS ON WELLS  ill or to deepen or reentry to a different reservoir  R PERMIT—" for such proposals	6. If Indian, Allottee or Tribe Name
SUBMIT	IN TRIPLICATE RECEIVED	7. If Unit or CA, Agreement Designation
1. Type of Well	SEP - 8 1993	
Oil X Gas Well Other		8. Well Name and No.
2. Name of Operator	A STATE OF THE PARTY.	Federal "T" #1
Mewbourne Oil Company 🗸		
3. Address and Telephone No.	: 00041 (FOE) 202 EDDE	30-015-26404  10. Field and Pool, or Exploratory Area
P.O. Box 5270 Hobbs, New Me 4. Location of Well (Footage, Sec., T., R., M., or Survey D	xico 88241 (505) 393-5905	North Illinois Camp
4. Execution of Well (Footage, Sec., 1., N., 19., of Sec.)	,	11. County or Parish, State Morrow
660' FNL & 990' FEL Sec. 12	P-T18S-R27F	
000 THE & 990 THE Sec. 12		Eddy Co. N.M.
12. CHECK APPROPRIATE BOX(	s) TO INDICATE NATURE OF NOTICE, REP	ORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTIO	
TIFE OF SOBMISSION		
Notice of Intent	Abandonment	Change of Plans  New Construction
X Subsequent Report	Recompletion Plugging Back	Non-Routine Fracturing
221 Subsequent Report	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.)
07/19/93 Set 4" CIBP @ 9950' 07/21/93 Set 5-1/2" CIBP @ 90	ull pertinent details, and give pertinent dates, including estimated date of star cal depths for all markers and zones pertinent to this work.)* Verba over Morrow Perfs. (10,008'-10,054') 240' @ top of liner. Dumped 4 sx. cron (8034'-8042' w/2 SPF & 8055'-8060	all from Adam - BLM. ) Dump 2 sx. cmt. nt.
all water.  07/24/93 Set cmt. retainer @  07/25/93 Perf. Cisco Formation  07/27/93 Set cmt. retainer @	8000'. Pumped 100 sx. cmt. into per on 7832'-7840' w/2 SPF. Swab tested 7820'. Pumped 100 sx. cmt. into per	rfs. (8034'-8060') all water. rfs. (7832'-7840')
07/20/03 Dorf Cisco Formatio	on 7790'-7798' w/2 SPF. Swab tested	all Water.
07/29/93 Set cmt. retainer @	7780'. Pumped 100 sx. cmt. into pe	rts. (//90 -//90 )
07/30/93 Perf. Cisco Formation	on 7760'-7768' w/2 SPF. Swab tested 7745'. Pumped 100 sx. cmt. into pe	nfs. (7760'-7768')
	on 7685'-7695' w/4 SPF. Swab tested	water w/show of gas.
08/01/93 Perf. Cisco Formation 08/03/93 Acidized Cisco Form	ation (7685'-7695') w/3000 gal 15% F	E 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 ther the forthcoing is true and correct		
Hard Towner	Tide Engineer	Date August 20, 1993
(This space for Federal or State office use)		
	Title	Date
Approved by	Title	
		Y. Lara
THE LOCAL CONTRACTOR OF THE PROPERTY OF THE PR	on knowingly and willfully to make to any department or agency of the Un	nited States any false, Tictifious or fraudulent stateme
Title 18 U.S.C. Section 1001, makes it a crime for any perso or representations as to any matter within its jurisdiction.	and the second s	· Outsi

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

### State of New Mexico Energy, Minerals and Natural Resources Department

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

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

### OIL CONSERVATION DIVISION

P.O. Box 2088

007 - 4 1002

STRICT III		Santa	re, New Mex	100 8/304	1-2000	U	61-4	1993	
Rio Brazos Rd., Aztec, NM 87410	REQUE	ST FOR	ALLOWABL	E AND A	UTHORIZ URAL GAS	S 1	0. ( [	). Mes:	
MEWBOURNE OIL COMP.						Mell VI	15-26404	1	
P.O. BOX 5270, HOB	RS NM	88241							
son(s) for Filing (Check proper box)	D3, 1411	002-11		Other	(Please explai	n)			
w Well	(	Change in Trai	asporter of:						
completion	Oil		Gas 📙						
hange in Operator L	Cannghead	Gas 🕅-Con	accountable				· · · · · · · · · · · · · · · · · · ·		
address of previous operator									
DESCRIPTION OF WELL A		SE Well No.   Poo	ol Name, Including	Formation	Mona	Kind of	Lease		use Na.
FEDERAL "T"		1 NC	RTH ILLING	IS CAME	NOLF C	MP Sine, F	ederal or Fee	NM-42	410
Cation Unit Letter	. 66	0' Fe	et From The _F	∖∟Line	and 990	Fee	i From The	FEL	Line
12 -	185		nge 27E		ирм, Е	DDY			County
				0.0					
DESIGNATION OF TRANS		or Condensate	AND NATUR	AL GAS Address (Giv	e address to wh	ich approved	copy of this f	orm is so be se	rd)
Amo	( <b>X</b> C)							· · · · · · · · · · · · · · · · · · ·	
ame of Authorized Transporter of Casing	head Gas	x or	Dry Gas .	Address (Giv BARTLE:	s address so wh SVILLE,	u <i>ch approved</i> OKLAHOM <i>P</i>	74004		
GPM GAS CORPORATION well produces oil or liquids,	Unit	Sec. TV	vp. Rge.		y connected?	When	?		
e location of tanks.	<u>i i</u>		18S 27E	YES	<b>.</b>		8-1-93		
this production is commingled with that f	rom any oth	er lease or poo	y' aine commedit	ng order mum	Det:				
		Oil Well	Gas Well	New Well	Workover	<b>Досреп</b>	Plug Back	Same Res'v	Diff Res'v
Designate Type of Completion	· (X)	al. Ready to Pr	1	Total Depth	J	<u> </u>	P.B.T.D.	<u></u>	<u></u>
ale Spudded				T CiliCon	Day		Tubing De		
levations (DF, RKB, RT, GR, etc.)	Name of P	roducing Form	nation.	Top Oil/Gas	rey		Tubing De	~··	
criorations	<u> </u>						Depth Case	ng Shoe	
		winnic C	ASING AND	CEMENT	ING RECO	RD	<u> </u>		
HOLE SIZE	CA	SING & TUB	ING SIZE	CLAVALATA	DEPTH SE	r		SACKS CEM	ENT
HOLE SIZE							<del> </del>		
							1		
	-						<u> </u>		
V. TEST DATA AND REQUE OIL WELL (Test must be after	ST FOR	ALLOWA	BLE	ha amal to	or exceed top a	ilowable for th	is depth or b	e for full 24 ho	urs.)
OIL WELL (Test must be after Date First New Oil Run To Tank	Date of T		loga ou ana musi	Producing 1	Method (Flow,	pump, gas lift,	esc.)		
Date First New Oil Rule 10 1 and	Date Of 1						Choke Siz	· · · · · · · · · · · · · · · · · · ·	
Length of Test	Tubing Pr	TEASUTE .		Casing Pro	rente				
Actual Prod. During Test	Oil - Bhi	<u> </u>	<u></u>	Water - Bb	is.		Gas- MC	F	
ALUM 1102 DE 24									
GAS WELL				This Con	ionsele/MMCF		Genvity o	Condensate	
Actual Prod. Test - MCF/D	Length of	( Tost		Boss. Com	AND MUNIC.				
Testing Method (pitot, back pr.)	Tubing P	ressure (Shus-	in)	Casing Pre	seeure (Shue-in)		Choke Si	2£	
VL OPERATOR CERTIFIC	CATE C	F COMP	LIANCE		חוו מר	)NSFB\	OITAV	N DIVIS	ION
I hereby certify that the rules and reg Division have been complied with an	nutrions of the	he Oil Comser	ration	11		-, -, -, - mail 1.			
Division have been complied with an is true and complete to the best of m	A promised in	and belief.		∥ Da	ate Approv	ved	<u> </u>	7 199	<del>13</del>
CAL					• •				
for the second				∥Ву	/	ORIGINA	LISIGNED	BY	
Signature XAY PRUDHOMME	Р	RODUCTIO	N ENGINEER			MIKE WILL SUPERVI	LEIAIVIO SOR. DIS	TRICT IF	
Printed Name			Tule	Tr	tle	JOI LINE	2011 210		<u> </u>

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 3161-1 iJune 19°∂

### UNITED STATES DEFARTMENT OF THE INTERIOR THE AT OF LAND MANACEMENT

NM OIL Stade Constitution Drawer DD FORM ATTRONES

Artosia, M. S. 88210 Expire. March 31, 1903

11. Designation and Sens. N.

C158

Do not use this form for proposals to drill of	D REPORTS ON WELLS or to deepen or reentry to a different reservoir. ERMIT—" for such proposals	NM-42410 6. If Indian, Allottee or Tribe Name
SUBMIT IN	TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well  Oil Gas Well Other  2. Name of Operator  Mewbourne 0il Company  3. Address and Telephone No.  P.O. Box 5270 Hobbs, New Mexic  4. Location of Well (Footage, Sec., T., R., M., or Survey Descrition of FNL & 990' FEL Sec. 12-T18S-R27F	007 2 0 1993 0 88241 (505) 393-5905	8. Well Name and No.  Federal "T" #] 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, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent  Subsequent Report  Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing Other Shut-in Status	Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off  Conversion to Injection  Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
of the lease for the above we copy of the stimulation repor	requests "shut-in" status pending 11. The well was spudded 06/28/90. t which charts the annulus pressure	Attached is a
down on the Wolfcamp reomplet	Approved For 12 Month Period  Enting 8/27/94	SEP 24 II ON AII 193
14. I hereby certify that the foregoing is true and correct  Signed	Title Production Engineer	Date 09/21/93
Approved by Conditions of approval, if any:	Tide Petrologum Englisher	Date 10 (18/93

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.

### 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	NH	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	Measured		Casing	Casing	Tubing	Tubing
Segment	Depth	TVD	ID	<b>O</b> D	ID	<b>0</b> D
Number	(ft)	(ft)	(inch)	(inch)	(inch)	(inch)
1	<b>68</b> 68	6868	4.950	5.500	2.441	2.875

### **PERFORATIONS**

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

### REMARKS ABOUT JOB

TREAT AS INST
NOTICE: THIS PEROPT IS BASED ON SOUND ENGINEERING PRACTICES. BUT BECAUSE OF VARIABLE WELL CONDITIONS AND OTHER INFORMATION WHICH

MUST BE RELIED UPON, HALLIBURTON MAKES NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE ACCURACY OF THE DATA OR OF ANY CALCULATIONS OR OPINIONS EXPRESSED HEREIN. YOU AGREE THAT HALLIBURTON SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, WHETHER DUE TO NEGLIGENCE

### 有形形的有用的形形的形形的形形的形形的形形 REALTIME STRIP CHART 野形像种用的新作物的影影的新作的新作品的

(psi)

1. Tubing Press

(psi) 2. Annulus Press (bpm) 3. Clean Rate CLEAN RATE ANNULUS PRESS TUBING PRESS psi bpm psi 5000 50 100004 10 08:18:33 -26 -3 0.13 08:21:33 -5 -3 3.38 **'**08:23:58 PAUSE 09:30:35 | -26 | 1068 | 0.06 13 12 14 08:33:35 -22 1000 3.09 15 08:36:35 -17 993 3.11 08:39:35 -16 1028 3.13

> 08:42:35 -15 1083 3.14

E15	E14	E13	E11 E12	E10	<b>13</b>	£8 \$3	<b>£</b> 7	
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69:69 69:12 69:12	69:06 6	69:60 1	69:00 2	08:57 1	69:54 3	68:51 3 1 3	68:48 4 1 3 68:51	68:48
2:3: 187: 96: 1.0:	;;35 103 99( 1.0)	1:3 176 105 1.6						1:3

Form 3160-5 (June 1990)

### U... IED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

NW TL CO	PONS COMMISSION FOR APPROVED Budget Burnen No. 1004-0135 NM 882065: March 31, 1993	CIS
vesia,		
	5. Lease Designation and Serial No.	
	NM 42410	

6. If Indian, Allonee 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 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 N. Illinois Camp Morrow 11. County or Parish, State  Eddy Co., N.M.
CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPO	ORT, OR OTHER DATA

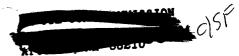
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	Abandonment Recompletion	Change of Plans New Construction
Subsequent Report  Final Abandonment Notice	Plugging Back Casing Repair Altering Casing Other Casing Integrity Test	Non-Routine Fracturing  Water Shut-Off  Conversion to Injection  Dispose Water  (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. Loaded casing with 80 bbls. water and tested to specific test witnessed and approved by BLM representation (Casing integrity test witnessed and approved by BLM representation) on 5/23/95.
  - Had no pressure on 5-1/2" 8-5/8" Annulus or 8-5/8" 13-3/8" Annulus 1 0 1995

Approved by	Tide		Date
(This space for Federal or State office use)			
1. I hereby cordify that the foregoigh is brue and correct Signed	Tide	Engineer	Date5/24/95
		ACCEPTED FOR RECORD ONL  Y.Jan  7 1995  CARLSBAD, NEW MEXICO	L CON. DIV. DIST. S

Fig. 18 U.S.C. Section 1905, mixed it a connect many period in which and without mixed to any Expanding a genus of the United States any false, fictitious or fraudulent statements in the residuent within the control of the United States any false, fictitious or fraudulent statements are to the united within the control of the United States any false, fictitious or fraudulent statements.

NM OIL CONS COMMISSION Drawer DD Artesia, NM 88210



Form 3160-5

**UNITED STATES** 

FORM APPROVED

(June 1990	DEPARTMEN	NT OF THE INTERIOR	Expires: March 31, 1993
	BUREAU OF	LAND MANAGEMENT	5. Lease Designation and Serial No.
	CUMPRY NOTICES	AND DEDODTE ON WELLS	NM 42410
Do		AND REPORTS ON WELLS	6. If Indian, Allottee or Tribe Name
Do no		rill or to deepen or reentry to a different reservoir.  R PERMIT—" for such proposals	
	SUBMIT	I IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of			1
Oil	ell 🗰 Well 📖 Other		8. Well Name and No.
2. Name o	•	$\checkmark$	Federal "T" #1
Mew	bourne Oil Company s and Telephone No.		4
	•	vice 892/1 /505) 202-5005	30-015-26404  10. Field and Pool, or Exploratory Area
4. Location	Box 5270 Hobbs, New Me on of Well (Footage, Sec., T., R., M., or Survey D	xico 88241 (505) 393-5905	N. Illinois Camp Morrow
	)' FNL & 990' FEL	• /	11. County or Parish, State
	. 12-T18S-R27E		
		Unit A	Eddy Co. N.M.
12.	CHECK APPROPRIATE BOX	(s) TO INDICATE NATURE OF NOTICE, REPOR	RT, 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 Other Temporary Abandonment	Conversion to Injection
		Other Temporary Houndonment	(Note: Report results of multiple completion on Well
13 Describ	be Proposed or Completed Operations (Clearly state a	ll pertinent details, and give pertinent dates, including estimated date of starting	Completion or Recompletion Report and Log form.)  any proposed work. If well is directionally drilled
		cal depths for all markers and zones pertinent to this work.)*	and the second s
Mew	bourne Oil requests tempo	rary abandonment status for the above	referenced well
		g further behind pipe potential. This	
		ed on the attached sundry notice.	•
			-
			AR CA
			NE TAREA
			3
			MARO 20 SELVEI
		17 MENTERNITERNI	
	7	APPROVED FOR 12 MORDINE AUG	SING DE O
	•	ENDING 5/23/96	3 0 1995 8 名 <b>经</b>
		EMPING AUG	9 A 1992 O

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.

Engineer

OIL CON. DIV.

Date Aug. 3, 1995

	· · · · · · · · · · · · · · · · · · ·		~	. ~
Form. 3160-5		ED STATES	1	FORM APPROVED
(June 1990)	DEPARTMEN	OF THE INTERIOR	ou o Distri	Budget Bureau No. 1004-0135  Expires March 31, 1993
•	BUREAU OF L	AND MANAGEMENT N.M.	Oil Cons. Divisi	Lease Designation and Sena No
	-	AND REPORTS ON WELLS	1st Street	NM 42410
	SUNDRY NOTICES	AND REPORTS ON WELLS	NM 88210-2834	
Do not use th				
Do not dos un	Use "APPLICATION FOR	PERMIT—" for such proposal	S "	
	SUBMIT	IN TRIPLICATE		7. If Unit or CA, Agreement Designation
1. Type of Well		nF	C 05 '96	
	Gas Well Other			8 Well Name and No.
2 Name of Operator			O. C. D.	Federal T #1
	0il Company		RTESIA, OFFICE	9. API Well No.
3 Address and Telep				30-015-26404
P.O. Box	5270, Hobbs, NM 8824	1 (505) 393–5905		10 Field and Pool, or Exploratory Area
4 Location of Well	(Footage Sec., T., R., M., or Survey De	scription)		N. Illinois Camp Morrow 11. County or Parish, State
660' FNL	& 990' FEL			Eddy Co., NM
Sec. 12-T	118S-R27E			Bady So., In
			TANATION DEDOD	T OD OTHER DATA
12 CHE	CK APPROPRIATE BOX	s) TO INDICATE NATURE OF	- NOTICE, REPOR	I, OR OTHER DATA
TYP	E OF SUBMISSION		TYPE OF ACTION	
x.	Notice of Intent	Abandonment		Change of Plans
U.S.r	40tte of Inch	Recompletion		New Construction
$\Box$	Subsequent Report	Plugging Back		Non-Routine Fracturing
		Casing Repair		Water Shut-Off
	Final Abandonment Notice	Altering Casing	Abandanmant	Conversion to Injection
_		X Other Tempor	ary Abandonment	(Note Report results of multiple completion on Well
			A: of ctarring	Completion or Recompletion Report and Log form )
13 Describe Propose	ed or Completed Operations (Clearly state a	Il pertinent details, and give pertinent dates, inclical depths for all markers and zones pertinent t	o this work.)*	any proposed work. If well is directionally drilled
34 1	- Adl Company request	s an extension of Tempo	orary Adamodimen	nt Status for the
•		NUTROSE OF EVALUATING	Turlier benind	bibe bosencial, into
well pas	sed the casing integr	ity test on 05/23/95 an	nd indicates no	additional tests should
be neede	d.			•
				y e <b>F</b>
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				ર્સ 🕺
				8.05 (VED)
				' <b>55</b>

Date 11/25/96 Engineer Title (This space for Federal or State office (see) Dete Tele . Approved by Conditions of approval, if any:

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

\*\*Reconstruction on Bayance Cide\*\*

Form 3160-5 (June 1990)

### UNITED STATES DEPARTMENT OF THE INTERIOR

INJUL OIL CORS. DIVISION 811 & st Street

C15 F

Artesia, NM 88210 2834 u No. 1004-0135

BUREAU OF		Expires: March 31, 1993
	LAND MANAGEMENT	5. Lease Designation and Serial No. NM-42410
	S AND REPORTS ON WELLS	6. If Indian, Allottee or Tribe Name
o not use this form for proposals to dr	ill or to deepen or reentry to a different reservoir	-
Use "APPLICATION FO	OR PERMIT-" for such proposals	
SUBMIT	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
Type of Well		
Oil Gas Well Well Other		8. Well Name and No.
Name of Operator		Federal T #1
Mewbourne Oil Com[any  Address and Telephone No.		9. API Well No. 30-015-26404
PO Box 5270, Hobbs, NM 505-393-5905		10. Field and Pool, or Exploratory Area
. Location of Well (Footage, Sec., T., R., M., or Survey De	escription)	N. Illinois Camp Morrow
660' FNL & 990' FEL, Sec.12 T-18S R-27E		11. County or Parish, State
		Eddy, NM
2. 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 Dispose Water
Describe Proposed or Completed Operations (Clearly directionally drilled, give subsurface locations and meaning the subsurface locations and meaning the subsurface locations.)	state all pertinet details, and give pertinent dates, including estimated dat asured and true vertical depths for all markders and zones pertinent to this	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)  e of starting any proposed work. If well is
13. Describe Proposed or Completed Operations (Clearly directionally drilled, give subsurface locations and med The above caption well was successfully MI The pressure chart is enclosed. If any question, please call.	state all perfinet details, and give pertinent dates, including estimated dat sourced and true vertical depths for all markders and zones pertinent to this T'ed on 10/25/2000. (520 psi for 30 mins.)	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)  e of starting any proposed work. If well is swork.)*

OCD-Artesia

## UNITED STATES

June 1990)	DEPARTMENT C	STATES E THE INTERIOR	-	FORM APPROVED Budget Bureau No. 1004-0135
Julic 1550)	BUREAU OF LAN			Expires: March 31, 1993
				<ol><li>Lease Designation and Serial No. NM-42410</li></ol>
Do not use this for Us	6. If Indian, Allottee or Tribe Name			
	SUBMIT IN	TRIPLICATE		7. If Unit or CA, Agreement Designation
1. Type of Well Gas	·			9. Moll Nome and No
Well Well	Other			8. Well Name and No. Federal T #1
<ol><li>Name of Operator Mewbourne Oil Con</li></ol>	miany			
3. Address and Telephone				9. API Well No. 30-015-26404
PO Box 5270, Hobb	bs, NM 505-393-5905			10. Field and Pool, or Exploratory Area
4. Location of Well (Footag	ge, Sec., T., R., M., or Survey Description	on)		N. Illinois Camp Morrow
660' FNI & 990' FF	EL, Sec.12 T-18S R-27E			11. County or Parish, State
	12, 000.12 1 100 11 2.12			Eddy, NM
12. CHECK	APPROPRIATE BOX(s) TO	INDICATE NATURE (	OF NOTICE, REPORT	, OR OTHER DATA
TYPE OF	SUBMISSION		TYPE OF ACTIO	N
X Notice of	of Intent	Abandonmen		Change of Plans
-		Recompletion		New Construction
Subseq	uent Report	Plugging Back	(	Non-Routine Fracturing
		Casing Repai	r	Water Shut-Off
☐ Final At	bandonment Notice	Altering Casir	-	Conversion to Injection
		X Other <u>CΠ</u>	& Extend T/ A.	Dispose Water
				(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
	Completed Operations (Clearly state al			
directionally drilled, given The above caption a 5 1/2" CIBP above schelude a CIT (500 psi) & a	well is currently under T/A stature all perfs @ 6800". We are conference of the passing, extend T/A status	and true vertical depths for all ma us. Mewbourne Oil Compa ensidering converting this	arkders and zones pertinent to the any would like to extend the	this work.)* this status. The well has
The above caption a 5 1/2" CIBP above schelude a CIT (500 psi) & a	well is currently under T/A stature all perfs @ 6800". We are conference of the passing, extend T/A status	and true vertical depths for all ma us. Mewbourne Oil Compa ensidering converting this	arkders and zones pertinent to the any would like to extend the	this work.)* this status. The well has
The above caption a 5 1/2" CIBP abov schelude a CIT (500 psi) & a	well is currently under T/A stature all perfs @ 6800". We are conference of the passing, extend T/A status	and true vertical depths for all ma us. Mewbourne Oil Compa ensidering converting this	arkders and zones pertinent to the any would like to extend the	this work.)*  this status. The well has ime, Mewbourne would like to
directionally drilled, given The above caption a 5 1/2" CIBP above schelude a CIT (500 psi) & a	well is currently under T/A stature all perfs @ 6800". We are conference of the passing, extend T/A status	and true vertical depths for all ma us. Mewbourne Oil Compa ensidering converting this	arkders and zones pertinent to the any would like to extend the	this work.)*  this status. The well has ime, Mewbourne would like to
The above caption a 5 1/2" CIBP abov schelude a CIT (500 psi) & a	well is currently under T/A stature all perfs @ 6800". We are conference of the passing, extend T/A status	and true vertical depths for all manus. Mewbourne Oil Compansidering converting this value for an additional time.	any would like to extend to a swell into a SWD. At this to	this work.)*  this status. The well has ime, Mewbourne would like to
The above caption a 5 1/2" CIBP above schelude a CIT (500 psi) & a lf any question, ples	well is currently under T/A stature all perfs @ 6800". We are conference of the passing, extend T/A status	and true vertical depths for all manus. Mewbourne Oil Compansidering converting this value for an additional time.	any would like to extend to a swell into a SWD. At this to	this work.)*  this status. The well has lime, Mewbourne would like to
The above caption a 5 1/2" CIBP above schelude a CIT (500 psi) & a lf any question, ples	well is currently under T/A stature all perfs @ 6800". We are conference of the passing, extend T/A status	and true vertical depths for all manus. Mewbourne Oil Compansidering converting this value for an additional time.	any would like to extend the well into a SWD. At this ti	this work.)*  this status. The well has ime, Mewbourne would like to
The above caption a 5 1/2" CIBP above schelude a CIT (500 psi) & a lf any question, ples	well is currently under T/A stature all perfs @ 6800". We are conference of the passing, extend T/A status	and true vertical depths for all ma us. Mewbourne Oil Compa ensidering converting this	any would like to extend the well into a SWD. At this ti	this work.)*  this status. The well has ime, Mewbourne would like to
The above caption a 5 1/2" CIBP above schelude a CIT (500 psi) & a lf any question, ples	well is currently under T/A state well is currently under T/A state we all perfs @ 6800". We are consider passing, extend T/A status was call.	and true vertical depths for all manus. Mewbourne Oil Compansidering converting this value for an additional time.	any would like to extend the well into a SWD. At this ti	this work.)*  this status. The well has ime, Mewbourne would like to
directionally drilled, given The above caption a 5 1/2" CIBP above schelude a CIT (500 psi) & a	well is currently under T/A stature all perfs @ 6800". We are conference of the passing, extend T/A status	and true vertical depths for all manus. Mewbourne Oil Compansidering converting this value for an additional time.	any would like to extend the well into a SWD. At this ti	this work.)*  this status. The well has ime, Mewbourne would like to
The above caption a 5 1/2" CIBP above schelude a CIT (500 psi) & a lf any question, ples	well is currently under T/A stature all perfs @ 6800". We are conference of the passing, extend T/A status	and true vertical depths for all manus. Mewbourne Oil Compansidering converting this value for an additional time.	any would like to extend the well into a SWD. At this ti	this work.)*  this status. The well has ime, Mewbourne would like to
directionally drilled, give  The above caption a 5 1/2" CIBP above schelude a CIT (500 psi) & a lift any question, please of the company of t	well is currently under T/A stature all perfs @ 6800". We are conference of the passing, extend T/A status	and true vertical depths for all manus. Mewbourne Oil Compansidering converting this value for an additional time.	any would like to extend the well into a SWD. At this ti	this status. The well has ime, Mewbourne would like to  RECEIVED  RECEIVED  200 007 10 10 2:

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 (June 1990)

### **TED STATES** DEDARTMENT OF THE INTERIOR

FORM APPROVED CISIC LIST BUTER BUTER AT THE Budget Bureau No. 1004-0135

Conversion to Injection

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

Dispose Water

Julie 133	,	TO THE INTERIOR OF THE STATE OF	Expires: March 31, 1993
		LAND MANAGEMENT	5. Lease Designation and Serial No. NM-42410
Do not	use this form for proposals to dri	AND REPORTS ON WELLS  Il or to deepen or reentry to a different reservoir.  PR PERMIT-" for such proposals	6. If Indian, Allottee or Tribe Name
	SUBMIT	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of	NI Gae	<u> </u>	8. Well Name and No.
	Well Other	<del>Piùù</del>	Federal T #1
Mewb	of Operator courne Oil Com[any s and Telephone No.	RECEIVED OCD - ARTESIA	9. API Well No. 30-015-26404
PO Bo	ox 5270, Hobbs, NM 505-393-5905	OCD - ARIC	10. Field and Pool, or Exploratory Area
4. Locatio	on of Well (Footage, Sec., T., R., M., or Survey De	scription)	N. Illinois Camp Morrow
660' F	FNL & 990' FEL, Sec.12 T-18S R-27E	\$05.62.82128	11. County or Parish, State
	112 4,000 1 44,000 12 1 10 11 11 11	0.000	Eddy, NM
12.	CHECK APPROPRIATE BOX(s	) TO INDICATE NATURE OF NOTICE, REPORT, C	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
		Cooling Bonnir	Water Shut-Off

Altering Casing

Other CIT & Extend T/ A.

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.

Final Abandonment Notice

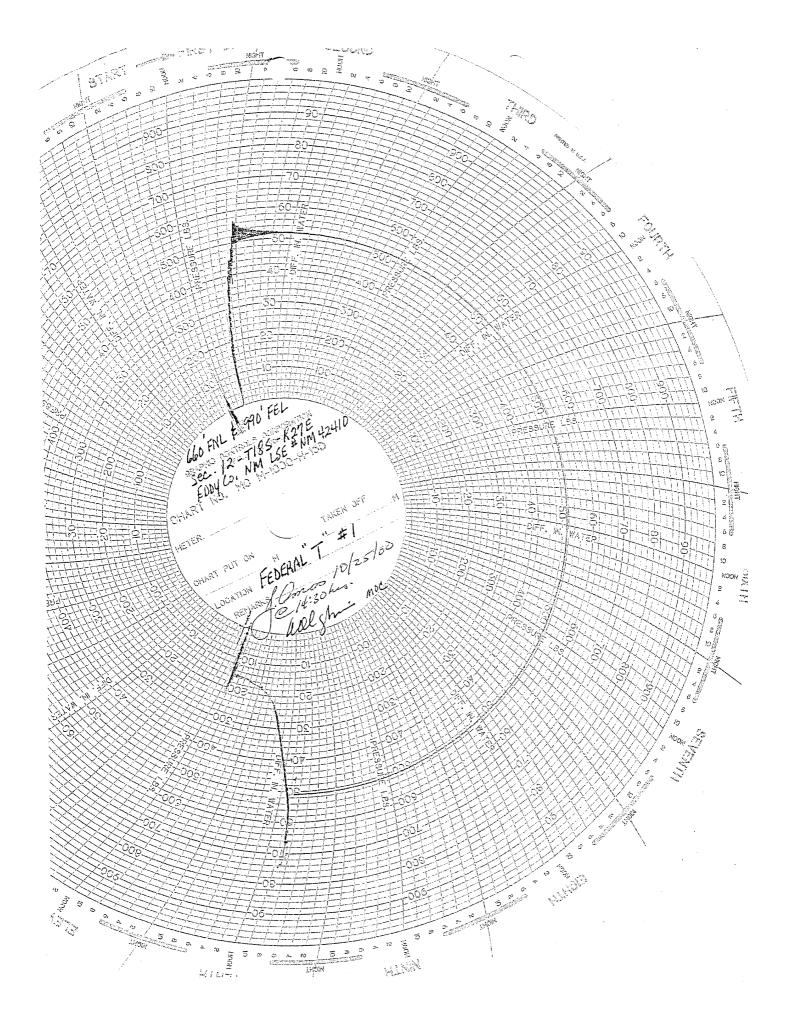
TA Approved	For1	∦onth <b>Period</b>		Zi 22
Ending —	10/25/20	<u></u>	AU OF	
Note to Operator: Please submit a city of pressure test chart,  14. I hereby certify that the foregoing is true and correct	Rec'd	a 120 y	LAND MG	IVED
14. I hereby certify that the foregoing is true and correct	, , ,		A A	<u>u</u>
Signed 11-111 AMERICA	N.M. Young	District Manager	Date	10/06/00
Approved by Title Conditions of approval, if any:		leun Zaglassi	Date	11/6/2000
$\mathcal{I}$				
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and statements or representations as to any matter within its jurisdiction.	d willfully to make to	any department or agency of the L	Inited States a	ny false, fictitious or fraudulent

<sup>13.</sup> 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.)\*

DECENVED

NOV-91P 2: 16

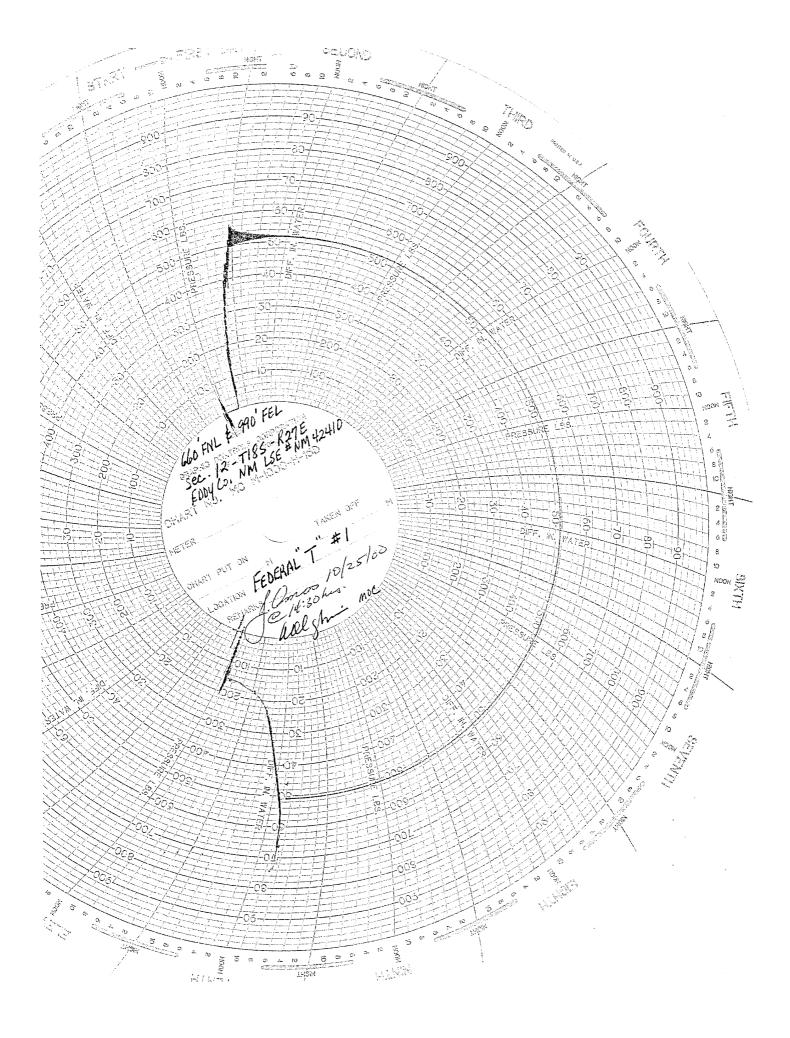
NOV-91P 2: 16



THEOENVED

NOV-91P 2: 16

NOV-91P 2: 16





# 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.

		INSPECTIO	N DETAIL	SECTION		
FEDERAL	Т 001	A-12	-18S-27E	30-015-26404-00-0	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		s for this well expired 10/2: 1. (Idle Well)	5/01. Last pro	duction reported was 7/	93. Well is in viola	ation of

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,

Min Black

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

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		INSPECTIO	N DETAIL	SECTION		
FEDERAL Inspection Date	T 001 Type Inspection	A-12	-18S-27E Violation?	30-015-26404-00-0 *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 stan	ding. Violatio	n 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

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# 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, Compliance Officer

Form 3160-5 (September 2001)

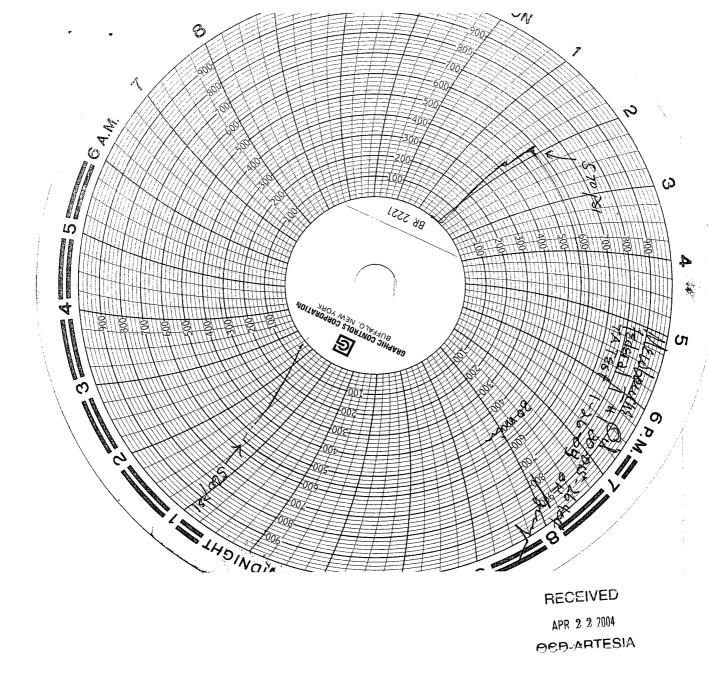
## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT OCD-ARTESIA

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.

5. Lease Serial No.
NM-42410
6. If Indian, Allottee or Tribe Name

		-			
	IPLICATE - Other instru	dions on revers	eside	7. If Unit or CA/.	Agreement, Name and/or No.
<ol> <li>Type of Well</li> <li>☐ Oil Well</li> <li>☐ Gas Well</li> </ol>	2 Other			8. Well Name at	nd No
2. Name of Operator	2 Other			Federal T#1	14 140.
Mewbourne Oil Company 147	44			9. API Well No	
3a. Address		3b. Phone No. (include	le area code)	30-015-26404	
PO Box 5270 Hobbs, NM 88	240	505-393-5905	RECEIVED	10. Field and Poo	ol, or Exploratory Area
4. Location of Well (Footage, Sec.,			4BB 0 0 0004	N Illinois Cam	<del></del>
6601 ENT. 9, 0001 EET. 0 10 T	F100 D27E		APR 2 2 2004	11. County or Pa	rish, State
660' FNL & 990' FEL, Sec 12-7	116S-R27E		OCD-ARTESIA	Eddy Co NM	
12. CHECK AP	PROPRIATE BOX(ES) TO	INDICATE NATU	RE OF NOTICE, RI	EPORT, OR OT	THER DATA
TYPE OF SUBMISSION		T	YPE OF ACTION		
<b></b>	Acidize [	Deepen	Production (Start	/Resume)	Water Shut-Off
☐ Notice of Intent	Alter Casing	Fracture Treat	Reclamation		Well Integrity
Subsequent Report	Casing Repair	New Construction	Recomplete	$\square$	Other MIT Test
	Change Plans	Plug and Abandon	Temporarily Aba	andon	
Final Abandonment Notice	Convert to Injection	Plug Back	Water Disposal		
The above caption well was suc The pressure chart is enclosed. Requesting extension of tempor 5 1/2" CIBP set @ 6800'. No ty	ecessfully MIT'ed on 01/26/04.  Tary abandon status.  Type of hardware in hole.	(Pressured casing to s	570#, held OK for 30 m  APPROVED I  ENDIING	nins)	
	· · · · · · · · · · · · · · · · · · ·	Tecord - Turio de			
<ol> <li>14. 1 hereby certify that the foregoin Name (PrintedITyped)</li> </ol>	ng is true and correct	1			
NM Young		Title I	Hobbs District Manager	r .	
Signature A. W.		Date	01/27/04		
	THIS SPACE FO	DRIFEDERAL ORS	STATE OFFICE USE		
Approved by (Signature)	/s/Joe G. I	_ara(	Name Printed/Typeds/ Joe G.	Lara <sub>Titl</sub>	e Pet, Engr.
Conditions of approval, if any, are certify that the applicant holds leg which would entitle the applicant to	cal or equitable title to those right	e does not warrant or s in the subject lease	CARLSBAD	FIELD OF	FICHATE 4/20/04
Title 18 U.S.C. Section 1001 and T States any false, fictitious or fraudul	itle 43 U.S.C. Section 1212, make lent statements or representations as	it a crime for any person to any matter within its	n knowingly and willfully jurisdiction.	to make to any dep	artment or agency of the United
(Continued on next page)					



RECEIVED APR 2 2 2004 OCD-ARTESIA

C104AReport

Page 1 of 1

<u>District II</u> 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 1	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:	2 22
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: Printed Name:	Mod Monty L. Whetstone	Signature: Printed Name:	Hong and 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

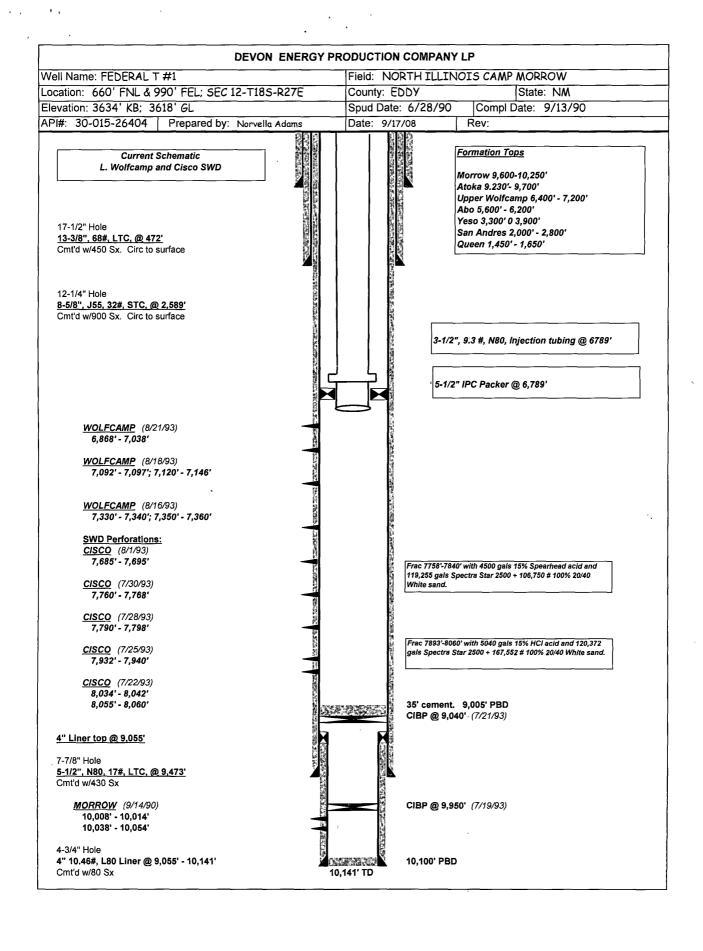
OCD-ARTESIA

FORM APROVED OMB NO 1004-0135 SIRES NOVEMBER 30, 2000

	ICES AND REPORTS ON W	VELLS OCD-ART	5. Lease Serial No.	NO VENIBER 30, 2000
Do not use this form		NM-42410		
	e Form 3160-3 (APD) for suc	ch proposals	6. If Indian, Allottee o	r Tribe Name
· SC	JBMIT IN TRIPLICATE		7. Unit or CA Agreer	nent Name and No.
1a Type of Well Oil Well Ga	s Well Other	.111 2 1 2008		
		OUI A LOOP	8 Well Name and No	).
2. Name of Operator	701/ 00HD 110/ 1 D	<b>UUU-ARIESIA</b>	•	ederal T 1
DEVON ENERGY PRODUCT	ION COMPANY, LP		9. API Well No	-015-26404
<ol> <li>Address and Telephone No.</li> <li>North Broadway, Oklaho</li> </ol>	ma City OK 73102	405-552-8198	10. Field and Pool, o	
Location of Well (Report location clear		· · · · · · · · · · · · · · · · · · ·		Volfcamp
660' FNL & 990' FEL	.,	ouorum roqumomomor	12. County or Parish	
Section 12 T18S R27E, l	Jnit A		Eddy	NM
	APPROPRIATE BOX(s) TO	INDICATE NATURE OF NOTICE, F		
TYPE OS SUBMISSION		TYPE OF A		
✓ Notice of Intent	☐ Acidize☐ Alter Casing		roduction (Start/Resume) eclamation	☐ Water Shut-Off ☐ Well Integrity
Subsequent Report	Casing Repair		ecomplete	Other
☐ Final Abandonment Notice	Change Plans	Plug and Abandon 🔲 T	emporarily Abandon	
	Convert to Injection	•	Vater Disposal	umate duration thereof. If the proposal
13 Describe Proposed or Completed Operations (Cideepen directionally or recomplete horizontally, give su	bsurface location and measured and	I true vertical depths of all pertinent markers and	zones Attach the Bond under which t	he work will be performed or provide
the Bond No on file with BLM/BIA Required subseque interval, a Form 3160-4 shall be filed once testing has l				
determined that the site is ready for final inspection)				
application filed with the OCE  1. RIH and drill out CIBP's at 6,  2. Perform injection step rate tes  3. Drill out CIBP at 7,560' and c  4. Perforate / Reperforate Cisco  7,932'-7,959'; 7,965'-7,967'; 7,97  5. Frac as recommended.  6. RIH with RBP and set at +/-7  7. Perforate / Reperforate Cisco  8. Frac as per recommended.  9. POOH with RBP and RIH with  10. Tie in disposal line routed fr  **** L: ** Lec. Celum  **** Plans for above	800', 7,078', & 7,265'. It in the Lower Wolfcar ement retainers at 7,74 with casing gun, 0.42" 1'-7,972'; 7,976'-7,978' 1',865'. with casing gun, 0.42" th tubing and packer. Som West Red Lake SW	15', 7,780', & 7,820', & 8,000 EHD, 2 spf from 7,893'-7,89'; 8,034'-8,042'; 8,055'-8,060' EHD, 2 spf at 7,758'-7,768'; Set packer at 7,600'. Perform VD Battery and establish inje	99'; 7,902'-7,907'; 7,910' '; 8160'-8164'.  7,790'-7,798'; 7,800'-78  1 injection step rate test ction.	318'; 7,832'-7,840'. in Cisco.
14. I hereby centify that the foregoing is t	ue and correct		· · · · · · · · · · · · · · · · · · ·	
Signed	Nan Title		ician Date AP	PRMI/FD
		or. Start Engineering Technic	AP	
(This space for Federal or State Office us		<b>a</b> -		
	\$500 17 13 E. Title	9	Date	1 2008
Conditions of approval, if any:		$i \sim \overline{i \lambda}$		. 0 2000
	INTOCIME	e any department or agency or the Onited State		
The to cook of toot, makes it a clinic lot ally	solver religing and williams to make	o any asparancia or agency or the ormed state	a arry raise, inclinade of transdiction (states)	Webide River And on any marrel Min

SUPERVISOR EPS

Submit 3 Copies To Appropriate District	State of New Me	exico		Form C-103
Office District I	Energy, Minerals and Natu			May 27, 2004
1625 N. French Dr , Hobbs, NM 88240		W	ELL API NO.	
<u>District II</u> 1301 W Grand Ave., Artesia, NM 88210	OIL CONSERVATION	DIVISION	30-015-	
District III	1220 South St. Fran	1 3	Indicate Type of Le	
1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe, NM 8		STATE	FEE
District IV 1220 S St Francis Dr, Santa Fe, NM	Salita Fe, NW 6	6.	State Oil & Gas Lea	ise No.
87505				
		UG BACK TO A F	Lease Name or Unitederal T	: Agreement Name
1. Type of Well: Oil Well Gas	Well Other -Convert to	SWD 8.	Well Number	
2. Name of Operator	ODUCTION COMPANY	1	OGRID Number	7
3. Address of Operator	ODUCTION COMPANY, I	10	613  Pool name or Wild	
20 North Broadway, Oklahoma City,	OK 73102 405-552		L. Wolfcamp	<u> </u>
	403 332			- 1012X
4. Well Location	ot contact		6 . 6 . 4 . 5	4.0m 1:
Unit Letter_A:_66	<del></del>			
Section 12		Range 27E	NMPM	County Eddy
11. 370	Elevation (Show whether DR	, RKB, RT, GR, etc.)		andti dita
Pit or Below-grade Tank Application  or Clos				
Pit typeDepth to Groundwater	Distance from nearest fresh v	vater well Distance	from nearest surface wa	iter
Pit Liner Thickness: mil I	Below-Grade Tank: Volume	bbls; Constr	uction Material	
12. Check Appre	opriate Box to Indicate N	lature of Notice, Rep	oort or Other Data	ì
NOTICE OF INTEN	TION TO:	OUDOE	OUENT DEDOE	OT OF
NOTICE OF INTEN			QUENT REPOR	
<del></del>	JG AND ABANDON	REMEDIAL WORK		ERING CASING
	ANGE PLANS	COMMENCE DRILLIN	<u>=</u>	ND A 🔲
PULL OR ALTER CASING   MU	LTIPLE COMPL	CASING/CEMENT JC	DB 🗆	
OTHER:		OTHER 🛭 Convert	to SWD. Admin. Ord	ler SWD-1135
13. Describe proposed or completed	operations. (Clearly state all	pertinent details, and give	ve pertinent dates, inc	cluding estimated date
of starting any proposed work).				
or recompletion.	,	•	J	
8/04/08 RU unit. ND wellhead and NU F	SOP. TIH with bit and drill co	ollars.		
8/05/08 Drill CIBP at 6800' and 7078'.				
8/06/08 Drilled through cement at 7525',				
8/07/08 Ran step rate test; pumped 50 bb			-20# psi, pumped 50	bbls at 2 bbls/min -
75# psi, pumped 50 bbls at 3 bbls/min – 1				
8/08/08 Trucked in and established inject		SWPD at 1/0 psi.		
8/11/08 Drilled cement retainers at 7745' 8/12/08 Drilled cement retainer at 7820' a		TOH with tubing and b	.it	
8/13/08 Perforate Cisco from 7893' – 806				% HCl + 120 372 gals
Spectra Star 2500 + 167,552 # 20/40 White		bet pueder at 7000 7 110	ie man bye re gans ib	, , , , , , , , , , , , , , , , , , ,
8/14/08 TIH with retrievable tool and la		cer and TOOH with pac	ker and tubing. RU v	wireline and perforate
Cisco from 7758'-7840'; 228 total holes.		1		•
8/15/08 TIH with packer and set at 7582'				
8/16/08 Frac 7758'-8060' with 4500 gals		55 gals Spectra 2500 + 1	106,750 # 20/40 100%	% White sand. RD.
8/18/08 Release packer. TOOH with pac	ū			
8/20/08 TIH with bailer and bailed sand.				
9/15/08 TIH with packer and tubing. Set				
Mike Bratcher with OCD. TOOH with tu	oing. KIH With 3 ½" IPC tub	ing and set at 6789'. In	jection line installatio	in in progress.
I hereby certify that the information above grade tank has been will be constructed or closed	e is true and complete to the b according to NMOCD guidelines [	est of my knowledge an □, a general permit □ or a	d belief. I further cert n (attached) alternative (	ify that any pit or below- OCD-approved plan □.
SIGNATURE		Cu Chaff Firebre	n Trankasiasa - DAT	C 0/17/00
SIGNATURE Norvella Adams	E-mail address:	_Sr. Staff Engineering		
Type or print name Norvella Adams For State Use Only	E-man address:	norvella.adams@dvn	.com reteption	ne No. 405-552-8198
APPROVED BY:	TITLE	make al feu une e e e e	DA	TE
Conditions of Approval (if any):		opted for record		





**Bill Richardson** Governor

Joanna Prukon 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.

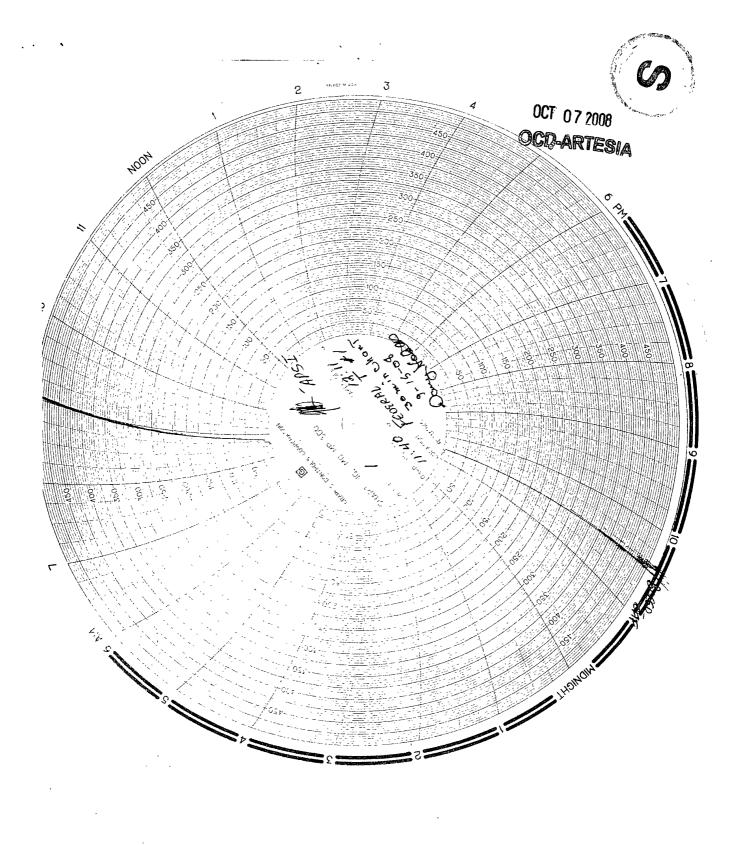
MARK E. FESMIRE, P.E.

Director

MEF/wvjj

cc: Oil Conservation Division - Artesia

Bureau of Land Management - Carlsbad



## SEP 19 2008

Submit to Appropriate D State Lease - 6 copies	District Offic	е					art	) A	DTEC	A	Fo	orm C-105	•
Fee Lease - 5 copies					New Mexico				RTESI		d June	10, 2003	
District 1 1625 N French Dr., Hot	bbs, NM 88		Er	iergy,	Minerals and	1 Natura	al Resources		Well API N		45 264	0.4	
District II 1301 W Grand Avenue	Artesia N	NM 88210 Oil Conservation Division						5 Indicate		15-264	<u></u>		
District III					outh St. France				5. Indicate Type of Lease STATE FEE				
1000 Rio Brazos Rd, Az District IV					e, NM 8750					gas Lease I			
1220 S St Francis Dr .													
WELL COMPL	ETION	OR RECO	MPLETIO	N RE	PORT AND I	_OG					2 2 3 4 4 4		
1a Type of Well		7		,	Convert to S	MD. Ada	-i Od CMD 442		7 Lease N	lame and U	nit Agre	ement Name	
Oil Work Type of Comple		Gas Well	∐ Dry 🔽	Other	Convert to S	WD; Adn	nin Order SWD-113	<u>55</u>					
☐ New \		Work Over	☐ Deeper	n 🔽	Plug Back 🔲	Diff. Res	vr., 🔲 Other			Fed	leral T	1	
<ol><li>Name of Opera</li></ol>	ator								8. Well No				
0.411		DEVON	ENERGY PR	ODUC	TION COMPAN	Y, LP			<u> </u>				1
3 Address of Ope	erator	20 North	Proadway	Oklah	oma City, OK 7	2402			9 Pool na	me or Wildca L. Wolfca		d Cisco 9/0	136
4 Well Location		20 140101	Bioadway,	OKIAII	onia City, OK 7	3102				L. WOIICA	inp and	d Cisco 10	( ) F
Unit Letter	A	66	0' feet fro	m the	NORTH lir	ne and	990'feet fro	om the	EAST	- line			
Section	12		Townsl	hip	18S Rang		27E NMPM			unty <b>Ed</b>	dy		
<ol><li>Date Spudded</li></ol>	<b>4</b>	11. Date T D	Reached	ı	ate Completed	1	evations (DR, RKB,	RT, GL	.)*  14 Ele	v Casinghe	ead		
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6/28/1990 15. Total Depth		8/25/ 16 Plug Back		47 161	9/15/08		3634' KB; 3618'		otary Tools		ble Too	· ·	
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19 Producing Inte	ervals(s),						Dilled B1		120	Was Direct	ional S	urvey Made	
L. Wolfcamp; 6,86			7,758' - 8,06	0' (Sa	It Water Dispos	al Only)					No		
21. Type Electric a DLL-MGRD, SDL-			,						22	Was Well (	Cored <b>N</b> o	,	
23	-D314 (01	igiliai logs)		CASI	NG RECORD (R	enort all	strings set in well)	1			INC	·	
Casing Size	e	Weigh	t LB /FT.	- T	Depth Se		Hole Size	$\top$	Cementing	Record		Amount Pulled	
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8-5/8"			32#		2589'		12 1/4"		900 s	SX .			
5-1/2"		<u> </u>	17#		9473'		7-7/8"		430 s	x			
						•		-					
24				liner	Record	·	L	25		Tubing Re	cord		
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20.5.4			<u> </u>				 	<u> </u>	0	PTA		<u></u>	
26 Perforation record	ra (interva	, size, and numb	er)				27. Acid, Shot, Fr Depth Interval	Tacture		nt and Kind		al Used	
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Wolfcamp; 7092'-	'-7097'; 7	120'-7146' (8	/18/93)				7893'-8060'		-5040 gais 15 2500 + 167,55			0,372 gals Spectra	
Wolfcamp; 7330'-	'-7340'; 7	350'-7360' (8	/16/93)				7893-6000	361 2	107,55	2 # 100 /6 **	inte 20	740 Sand.	
Cisco; 7893'-806												<u>-</u>	
Cisco; 7758'-784			DD)			•	1					and 119,255 gals	
Morrow; 10008'-1	10054; (	suii under Cit	or <sub>i</sub>				7758'-7840'	Spect	tra Star 2500	+ 106,750 #	100%	White 20/40 Sand.	
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			,					$\vdash$					
28				Pi	RODUCTION			<u> </u>					
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Flowing Tubing Pr	ress	Casing Pressi	l l		Oil - Bbl		Gas - MCF	vvater	- BDI	Oil Gravity - /	API (Con	"	
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30. List Attachmen													
Wellbore schemat	tic												
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SIGNATURE	<u> </u>		$\leq \sim$	Name	Non	vella Adar	ms Title	Sr St	aff Engineerin	g Techniciar	DA	ATE 9/17/2008	

Accepted for record NMOCD

E-mail Address.

norvella.adams@dvn.com

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 dulled 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
Northwestern New Mexico
476 T. Canyon T. Penn "B"
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T. Penn "B" rn New Mexico Yates Queen T. Canyon T. Strawn 1218 T. Kirtland-Fruitland T. Penn "C" T Penn "D" T. Leadville Grayburg San Andres T Atoka T Miss T. Pictured Cliffs T Cliff House 2072 Tubb 4824 . Devonian Menefee Madison Abo Wolfcamp Silunan T. Point Lookout Elbert McCracken 7682 Montoya T Mancos Simpson Cisco T. Gallup Ignacio Otzte Strawn 9513 McKee Base Greenhorn Granite . Ellenburger T. Dakota 9828 Gr Wash T. Morrison Delaware Sand T. Todilto 10104 T. Bone Springs Entrada Wingate Chinle T Permian T. Penn "A' OIL OR GAS SANDS OR ZONES

Atoka Morrow Morrow Clastics Lower Morrow T. Wolfcamp T Cisco (Bough C) IMPORTANT WATER SANDS Include data on rate of water inflow and elevation to which water rose in hole .... feet No. 3, from .. . feet . . LITHOLOGY RECORD (Attach additional sheet if necessary) Thickness in Thicknes In From Lithology From Lithology То Feet Feet

Form 3160-4 (February 2005)

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## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCT 0 6 2008 FORM APROVED CD-ARTESIA EXPRESS March 31, 2007

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2 Name of Operator   DEVON ENERGY PRODUCTION COMPANY, LP   3 Address   DEVON ENERGY PRODUCTION COMPANY, LP   3 Address   DEVON ENERGY PRODUCTION COMPANY, LP   3 Address   DEVON ENERGY PRODUCTION COMPANY, LP   3 APPINENT NO. 07-15-2444_005.2   4 Location of Well (Report location clearly and in accordance with Federal requirements)*   4 Location of Well (Report location clearly and in accordance with Federal requirements)*   4 Location of Well (Report location clearly and in accordance with Federal requirements)*   4 Location of Well (Report location clearly and in accordance with Federal requirements)*   4 Location of Well (Report location clearly and in accordance with Federal requirements)*   4 Location of Well (Report location clearly and in accordance with Federal requirements)*   4 Location of Well (Report location clearly and in accordance with Federal requirements)*   4 Location of Well (Report location clearly and in accordance with Federal requirements)*   4 Location clearly and in accordance with Federal Report Level (Level and Survey)*   4 Location clearly and Care of Survey of the Survey of t	ь Тур	e of C						ļ	7. Half or CA Associated Name and No.										
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18. Total Depth   18. Plug Back   17. Plug B	14 Da	ate Spi	udded		15 Date T	D Reached		16. Dat	•					]17	Elevat	ions (DR	I, RKB, RT, GL)	*	ļ
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12   14"   8-5/8"/155   32   2588'   900 Sx   Surf					Top (MD)			Dep	oth	No			Ceme	ent	(B	BL)		Amoul	it Pulled
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D.  27 Acid, Fracture, Treatment, Cement Squeeze, Etc.  Depth Interval  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 Tested Production Oil BBL Gas MCF Water BBL Gas Oil Ratio Water BBL Gas Oil Ratio Water BBL Gas Oil Ratio Water BBL Gas Oil Ratio Water BBL Oil Gravity Freduction - Interval B  Date First NA  24  Choke Tbg Press Size Fiwg Si Csg Press 24 Hr Rate Oil BBL Gas MCF Water BBL Gas Oil Ratio Water BBL Gas Oil Ratio Water BBL Oil Gravity Freduction - Interval B  Date First Froduced Test Date First Froduced Test Date First Freduced Test Date First Freduced Test Date Freduction - Interval B  Date First Freduced Test Date Freduced Test Date Freduction - Interval B  Date First Freduced Test Date Freduced Test Date Freduced Test Date Freduced Test Date Freduced Test Date Freduced Test Date Freduction. Method	VVOICE	шр			0000	730	00							+			511 101 0110		
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27 Acid, Fracture, Treatment, Cement Squeeze, Etc.  Depth Interval  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 Tested Production Oil BBL Gas MCF Water BBL Corr. API Gas Gravity Production Method  Choke Tbg Press Size Fiwg SI Csg Press 24 Hr Rate Oil BBL Gas MCF Water BBL Gas Oil Ratio Welsatus DAV DH. Gas Gravity Production Interval B  Date First Hours Test Produced Test Date Tested Production Oil BBL Gas MCF Water BBL Gas Oil Ratio Welsatus DAV DH. Gas Gravity Produced Test Date Tested Production Oil BBL Gas MCF Water BBL Corr. API Gas Gravity Production Method  28a, Production - Interval B Produced Test Date Tested Production Oil BBL Gas MCF Water BBL Corr. API Gas Gravity Production Method																			_
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PETROLEUM ENGINEER																		D.	

Choke Size	Tbg. Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BE	3L	Gas · Oil Ratio	Well Status		
(See instru	ctions and space	es for addition	nal data on reve	rse side)		L			L		
28b Produ	(See instructions and spaces for additional data on reverse side)  28b Production - Interval C										
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		rested	Production	Oil BBL	Gas MCF	Water BE		Corr. API	Gas Gravity		Production Method
Choke Size	Tbg. Press. Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BE	BL.	Gas : Oıl Ratio	Well Status		
28c Produ	ction - Interval D										
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Choke		70000		OII BBE	Casimor	vvale: Di	33711		Cas Glavity		Troduction Method
Size	Tbg Press. Flwg SI	Csg Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BE	3L	Gas : Oil Ratio	Well Status		
(See instruc	ctions and space	es for additio	nal data on reve	rse side)		L					
29. Disposi	tion of Gas (Solo	d, used for fu	iel, vented, etc.)					,			
30 Summa	ry of Porous Zor	nes (Include	Aquifers).				31	Formation (Log	) Markers		
			d contents there								
	including depth and recoveries.	interval teste	ed, cushion used	l, time tool o	pen, flowing	and shut-in					
											Top
Fo	rmation	Тор	Bottom	Descrip	tions, Conte	nts, etc	· ·		Name		Meas Depth
ì							Yate Que				476'  1218'
								yburg Andres			1572'  2072'
							Tub	b			4824'
			`					fcamp			6016'  7682'
1							Cisc Stra				8912'  9513'
:		ľ					Atok	ка			9628'
}							Mor Mor	row row Clastics			9828' 9965'
							Low	er Morrow			10104'
											1
}											
32. Addition	nal remarks (incli	ude plugging	procedure).						· · · · · · · · · · · · · · · · · · ·		<del> </del>
[											
1											
]											
33 Indicate	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										
			ment verification		Core Analys				e Schematic		
34. I hereby	34. Thereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*										
Name (Plea	se print)	,	Norvella	Adams		Title		s	r. Staff Engineering	Technicia	in
Signature	1				<b>\</b>	Date		9/17/2			
			C. Section 1212, nations as to any m			on knowlingly	and v	vilifully to make to	any department or ag	ency of the	United States any false,

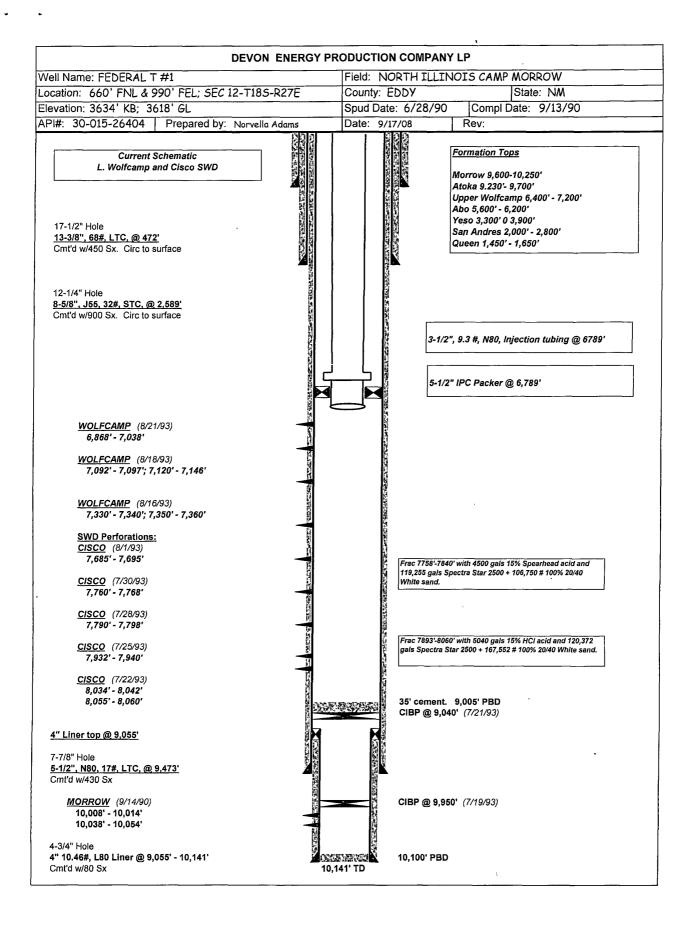
Form 3160-5 (February 2005)

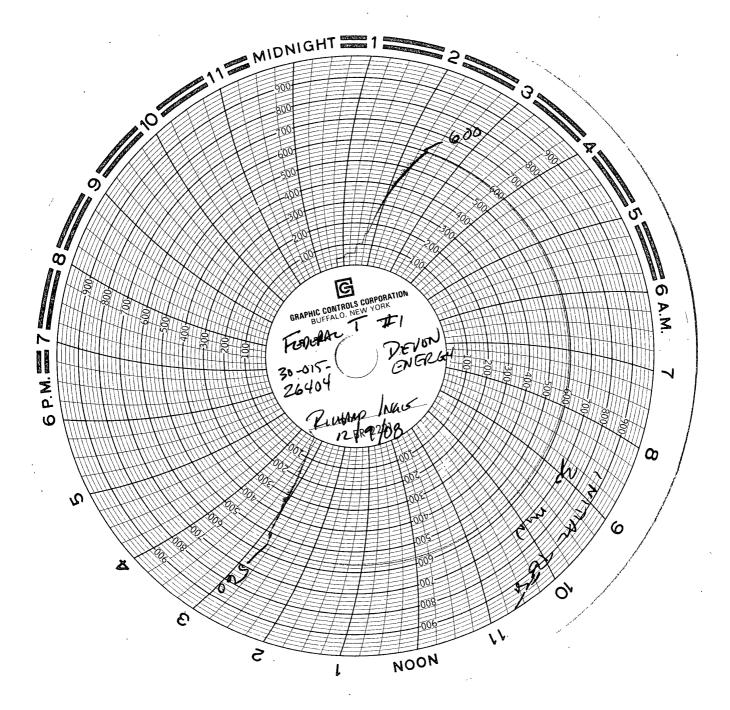
## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APROVED OMB NO. 1004-0137 EXPIRES: March 31, 2007

SUNDRY NOT	5 Lease Serial No						
Do not use this form	NM-42410 6. If Indian, Allottee or Tribe Name						
abandoned well. Use	6. II Indian, Allottee	or tribe name					
SUBMIT IN TRIPL	ICATE - Other instructions on	page 2		7. Unit or CA Agree	mont Name and No		
Type of Well				7. Officer CA Agree	ment ivalle and ivo.		
Oil Well Gas Well	Other SWD convers	ion. Admin Order SWD-1	135	8 Well Name and No			
2. Name of Operator				f F	ederal T 1		
DEVON ENERGY PRODUCT	ION COMPANY, LP			9 API Well No			
3a, Address		3b. Phone No. (include a	rea code)	30	0-015-26404		
20 North Broadway, Oklahoma City, OK	73102	405-552-8198	,	10. Field and Pool, o	or Exploratory Area		
4 Location of Well (Footage, Sec., T., F		-12		1	camp and Cisco		
,	2 18S 27E			11. County or Parish, State			
				Eddy	NM		
12 CHECK	APPROPRIATE BOX(es) TO	INDICATE NATURE OF N	OTICE REPO	<u> </u>			
TYPE OS SUBMISSION			OF ACTION	K. OKO MEKDANA			
	Acidize	Deepen	Production	n (Start/Resume)	Water Shut-Off		
☐ Notice of Intent	Alter Casing	Fracture Treat	Reclamati		Well Integrity		
✓ Subsequent Report	Casing Repair	New Construction	Recomple		Other		
☐ Final Abandonment Notice	Change Plans	Plug and Abandon		ily Abandon			
13 Describe Proposed or Completed Operations (Cle	Convert to Injection	Plug Back	Water Dis	<del>`</del>	wmate duration thereof. If the proposal		
deepen directionally or recomplete horizontally, give sut							
the Bond No on file with BLM/BIA Required subseque interval, a Form 3160-4 shall be filed once testing has b							
determined that the site is ready for final inspection)	een completed Final Abandonment No	ices shall be filed only after all requ	irement, including i	reclamation, have been com	pieted, and the operator has		
Converted to SWD. Administrative Orde 8/04/08 RU unit. ND wellhead and NU 18/05/08 Drill CIBP at 6800' and 7078'. 8/05/08 Drill CIBP at 6800' and 7078'. 8/05/08 Drilled through cement at 7525' 8/07/08 Ran step rate test; pumped 50 lbbls at 3 bbls/min – 170# psi, pumped 50 lbbls at	3OP. TIH with bit and drill colling. CIBP at 7300' and cement at obls at 1/2 bbl/min – 0# psi, pun 0 bbls at 4 bbls/min – 250 psi. ction in the Wolfcamp at 150 B', and 7780'.  and 8000'. Circulate hole and 160', total 140 holes. TIH and 160', total 140 holes. TIH and 160', total 140 holes. TIH and 160'. NU frac valve.  15% Spearhead acid + 119,2 cker and tubing Bailed sand to 8460'. TOOH tocker at 6789'. ND BOP and	7560' and CIBP at 7595'.  sped 50 bbls at 1 bbl/min -2  BWPD at 170 psi.  TOH with tubing and bit.  set packer at 7688'. Frac v  ker and TOOH with packer  55 gals Spectra 2500 + 106  with tubing. ND BOP and  d NU tree Ran MIT test to	vith 5,040 gals and tubing. R 3,750 # 20/40 NU flange. W 500 # for 30 r	15% HCI + 120,372 g RU wireline and perfora 100% White sand. Ri aiting on tubing.	gals Spectra Star 2500 + ate Cisco from 7758'-7840'; D.		
					: 		
14. I hereby certify that the foregoing is tru Name: Norvella Adams	e and correct Title	Sr. Staff Engineering	Technician				
					<del></del>		
Signature FOR DE	Date CORPHS SPACE FOR F	9/17/2008 FDERAL OR STATE	OFFICE	ISE			
		LUERAL OR STATE	OFFICE U	1			
Approved by S/DAVID	TIGLASS			}			
050 0 0000	Title			Date			
SEP 2 9 2008		Acc	cepted to	record			
Conditions of approval, if any are attached		3.44	NMOC	D	`		
notice does not warrant or certify that the a	pplicant holds legal or				•		
equitable title to those fights in the subject	lease which would						

entitle the applicant to consider the subject lease which would entitle the subject lease which would entit the subject lease





Lime

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 Op	perator Information	New Operator	Information
•	*	Effective Date:	Effective on the date of approval by the OCD
OGRID:	6137	OGRID:	277558
	DEVON ENERGY PRODUCTION	– Name:	LIME ROCK RESOURCES II-A, L.P.
Name: Address:	COMPANY, LP 20 N Broadway	_Name. _Address:	1111 Bagby Street
Address.	2011210000000		Suite 4600
City, State, Z	Zip: Oklahoma City, OK 73102	_ City, State, Zip:	: Houston, TX 77002
Additionally, the following	by signing below, LIME ROCK RES	SOURCES II-A, I	L.P. certifies that it has read and understands
Previous Op		New Ope	erator
Signature:	avid S. Frank	Signature Printed Name:	C. The Miller
Title: Da	avid S. Frank – Attorney-in-Fact	Title:	Chief Operating Officer
Date: 12	2/09/2010 Phone: (405)-552-78	881 Date:	12/17/10 Phone: 713 292 9514
Rock Res	NMOCD App ources II-A-Fleer one Shape to	Aber speedy of	Pane Aistenta list effective 12/09/201

C-145 Page 2 of 3

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
- 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). 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.
- 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.



## NAVAJO REFINING COMPANY Map ID No. \\ Artificial Penetration Review

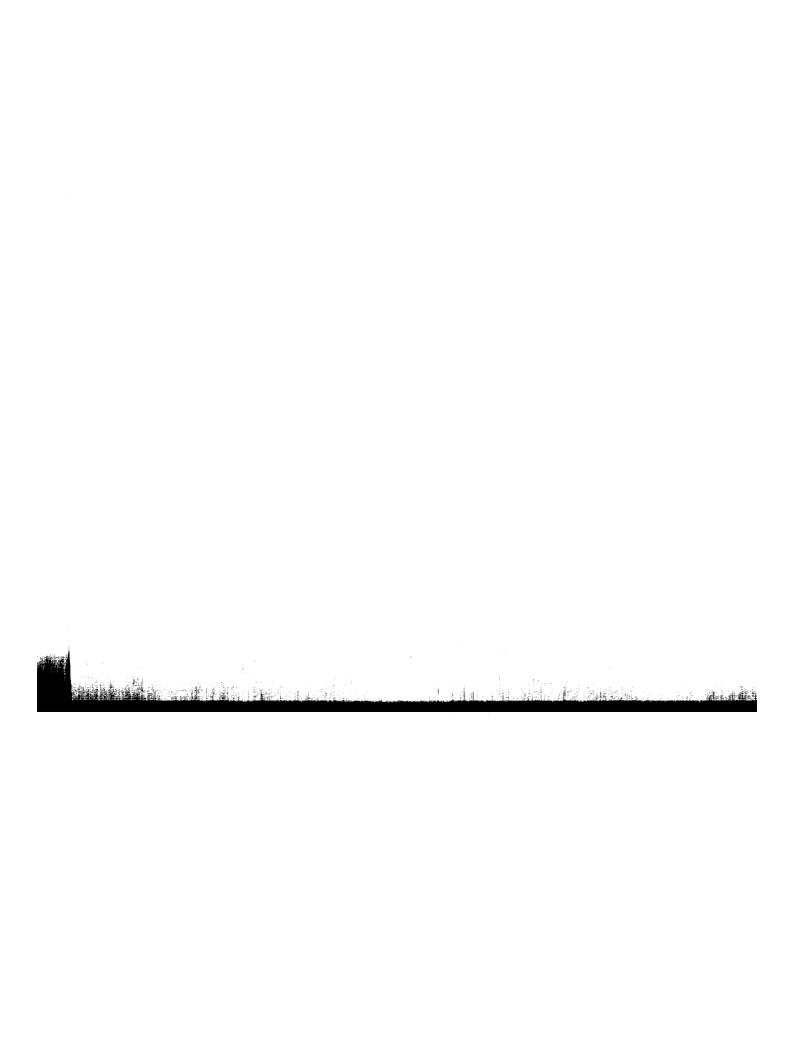
OPERATOR Navajo Refining Co.	STATUS Active Injection
LEASE WDW	LOCATION Sec. 2 -T185-R27E
WELL NUMBER 2	
DRILLED 5-05-99	MUD FILLED BOREHOLE NA
PLUGGED NA	TOP OF INJECTION ZONE 7270'
PLUGGED NH	API NO. <u>30-015- 20894</u>
REMARKS: Top of Cement behind 5	1/2" @ surface
	<del></del>
	133/8"@ 40'
Taranta de la composición del composición de la composición de la composición de la composición del composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la composición de la co	
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	Th. 6 75321
	Tbg @ 7523' PKr @ 7523'- 7528'
1	
	Perfs: 7570'-8399'
	51/2" @ 8869' W/1570 sx
(tucities) Cx	nt plug: 9675'-9775'
TD: 10,372'	8TD: 9200'
	K (1)', ™(20()'

Map ID 11 50-015-2089

PROP 23592

PROP 969/8

Navajo (Injecting) Permo-Penny





MADE IN II & 4

9-26-85

COMPENSATED HEUTRON

GAMMA RAY

SURF-1768

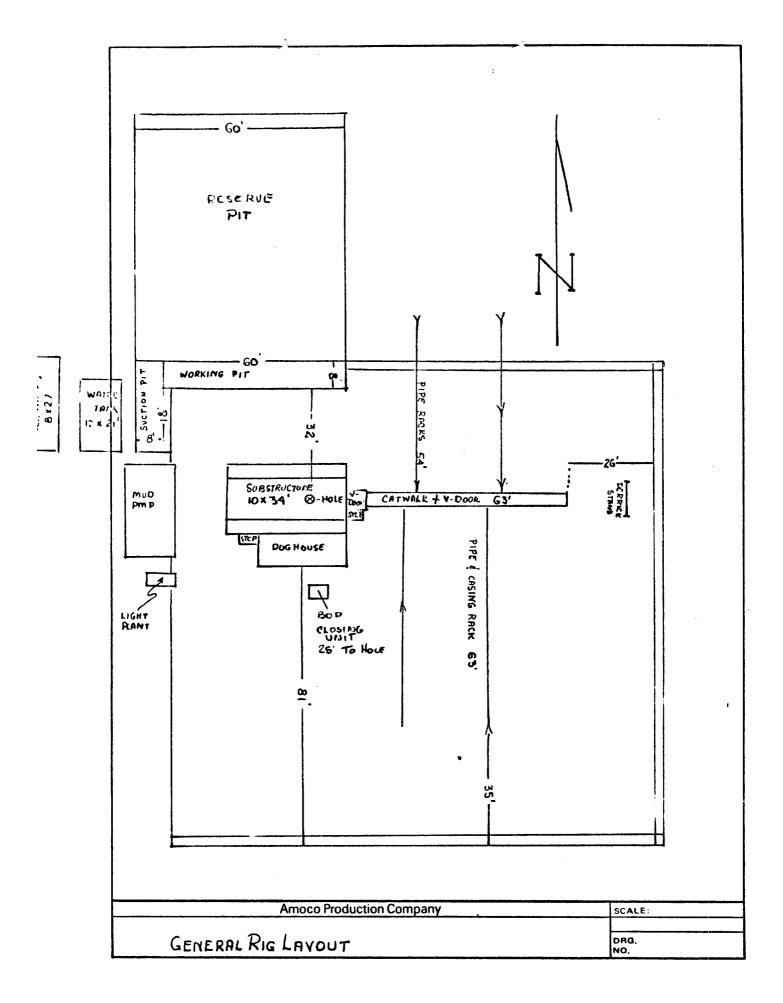
5-13-99

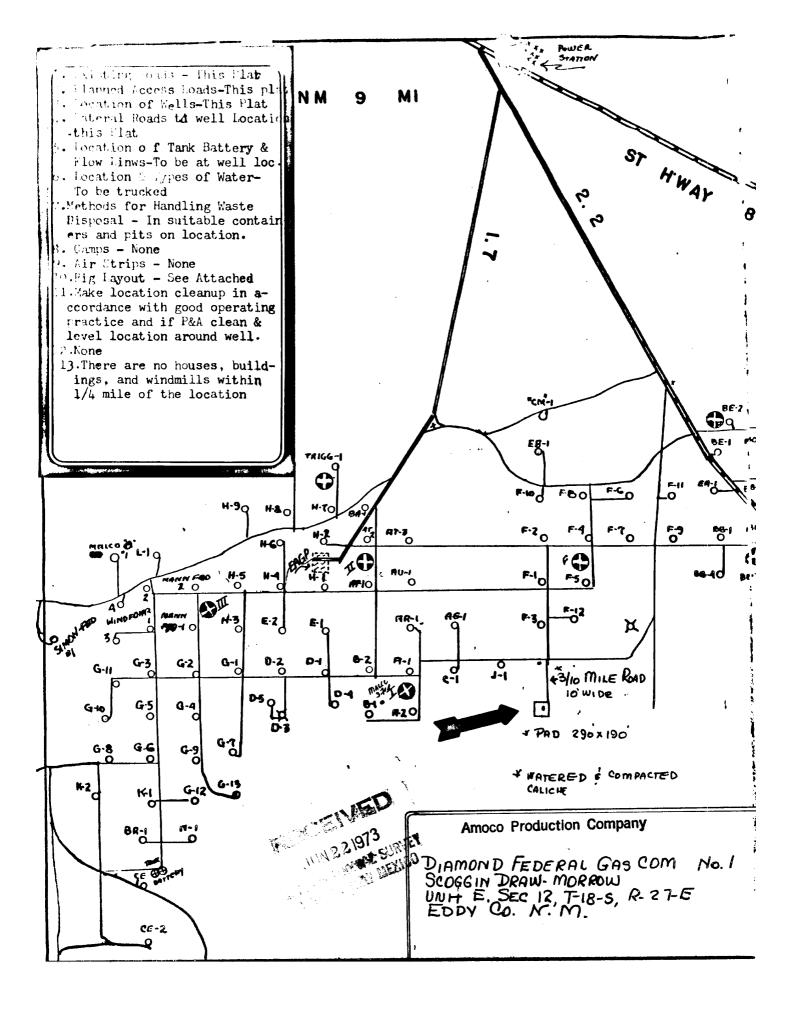
MSG GAMMY COLLAR

CBL LOG

SURF-1910 1

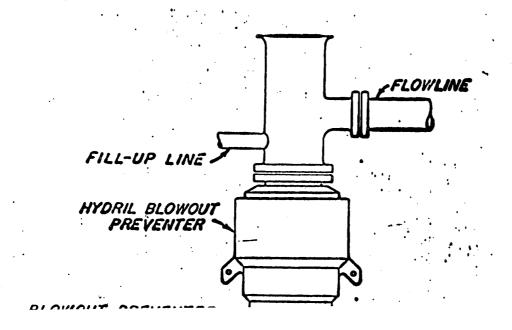
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#### BLOWOUT PREVENTER HOOK-UP FOR DRILLING BELOW INTERMEDIATE CASING

- 1. BLOKOUT PREVENTERS AND MASTER VALVE TO BE FLUID OPERATED AND ALL PITTINGS 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 CONTINUES THE SERVER HOSE SERVER IN

DIAMOND FEARTAL KUS COM AT SHID PRODUCTION COMPANY 18 South 27 LAST EDDY 660 MORROW SCOGGIN DRAW MORROW (Fra) I Stoling the acronge desirented to the subject well by a slored pencil or hachure marks on the plat below to the construction is a see as deducated to the cell outline each and identify the ownership there follows as a security percent weter often It is a different or not thip in deficated to the well, have the interests of all owners in a contable to a more eitheath on, unitization three productions are? The Houser is "cest" type of consolidation of a contract of the samers and tract descriptions which have actually been a considered. Escape on super-And the office of seat of the second We allowed a will be assigned to the well until all interests have been consolidated the community areas and protection to entry they are the experience and has non-standard near eliminating such interests, has been approved by the Common 1818 C. C. NM-6852 theer errors with a Amoco 100% 160 Acres 660' 1 Amoco Production Company JUN 2 1 1973 NM-6853 Amous 100% 160 Acres JUNE 20, 1973

\$40, 23 1 2840 2010 1800 1000 800

drilling into the <u>Wolfcamp formation</u>
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 be notified in sufficient time for a replaced. This office should 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
- 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. U. C. C. COPY SUBMIT IN TRICATES

(Other Instruction 8 on reverse sloc.,

Form approved. Budget Bureau No. 42-R1425.

# U...TED STATES DEPARTMENT OF THE INTERIOR

30 - 0/5-20894 5. LEASE DESIGNATION AND SERIAL NO.

•	GEOLO	GICAL SURVEY		/	VM-6852		
APPLICATION	I FOR PERMIT 1	O DRILL, DEEPI	N, OR PLUG B	ACK 6. 1F	INDIAN, ALLOTTEE OR TRIBE NAM		
1a. TYPE OF WORK	LL 🛛	DEEPEN 🗌	PLUG BAG	- <b>N</b> L L	IT AGREEMENT NAME		
b. Type of well		RECEIST	MLE MULTIP		OND EDERAL GAS		
	tion Company	JUL9	1973	9. WE	ILI NO.		
3. ADDRESS OF OPERATOR BOX 68, HOBBS, I	N. M. 88240			7 10. F	ELD AND POOL, OR WILDCAT		
4. LOCATION OF WELL (Re	port location clearly and	ARTESIA, U	E SE4 NW/4	11. 8	GIN DRAW MORBOU BC., T., B., M., OR BLK. ND SURVEY OR AREA		
	660'FWL			12-	18-27 NMP		
14. DISTANCE IN MILES A	ND DIRECTION FROM NEA	REST TOWN OR POST OFFIC	P.	T-	OUNTY OR PARISH 13. STATE		
15. DISTANCE FROM PROPO LOCATION TO NEAREST PROPERTY OR LEASE L	INE, FT.	16. No	O. OF ACRES IN LEASE	17. NO. OF ACRE	BASSIGNED  1.1.  320		
(Also to nearest drig 18. DISTANCE FROM PROP	OSED LOCATION*	19. PI	ROPOSED DEPTH	20. ROTARY OR C	ABLE TOOLS		
TO NEAREST WELL, DI OR APPLIED FOR, ON THI	IS LEASE, FT.		10,000	<b>KOTĂ®</b>	APPROX. DATE WORK WILL STAR		
3607' $G$	۷				7-1-73		
23.		PROPOSED CASING AN	D CEMENTING PROGR.	AM			
SIZE OF HOLE	BIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	Girc.	QUANTITY OF CEMENT		
7 1/8"	4 1/2	95-116°	- 11.6" 10000 s		WEFICIENT TO FILL		
				1	OUE UPPERMOST		
BOP progr Mud Aogr 0- 1000 1000-9000 9000-10000	eam attach  um:  Natikl 7  Natikl 7  pun. gr  puntur  proposed program: If drill or deepen direction	ed.  Must water  islity for  s & sample	Dolids g	cl far a	some made, in all mpting sales factory  zone and proposed new productive vertical depths. Give blow		
preventer program, if an 24.	. E. York	TITLE	AREA ENGINEER		DATE <u>JUN 2 1 1973</u>		
preventer program, if an 24.	ral or State office use)	TITLE		0.4073	DATE JUN 2 1 1973		
preventer program, if an 24.	ral or State office use)	TITLE		UL 6 1973	DATE JUN 2 1 1973		
preventer program, if an 24.  SIGNED (This space for Federal	eral or State office use)	2	J	<b>UL</b> 6 1973	DATE JUL 6 1973		

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JUL 1 0 1973

P. O. Drawer W Artesia, New Mexico 88210 D. C. C. ARTESIA, DFFICE

July 9, 1973

Mr. Jim York Amoco Production Company Post Office Box 68 Hobbs, New Mexico 88240

Bear 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 SWANWA sec. 12, T. 18 S., R. 27 E., N.M.P.M., Eddy County, New Mexico.

Sincerely yours,

COMA BOW JAMES A. WINGER

James A. Knauf District Engineer

cc: Roswell N.M.O.C.C. (2)

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JUL 1 0 1973

D. C. C.

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1 (m 2 (d) V (m) (dia)	Uh ED STATES:  PARTMENT OF THE INTER  GEOLOG CAL SURVEY	O. C. C. COPY  SUBMIT IN TRIL ATE- COther Instructions on re RIOR verse side)	pp - 205
the not use this form	/ NOTICES AND REPORTS for proposals to drill or to deepen or plug "APPLICATION FOR PERMIT" for such	back to a different reservoir.	6 IF INDIAN AUDON . TRIBS NAME
2 NME OF OFFICER AMOCO Production	OTHER DRILLING F	ECELVED	DIAMOND FED. GAS COM
3. ADDRESS OF OPERATOR BOX 68, HOBBS, N. M. 4. To attor of white (Report See also space 17 below.) At surface		ARTESIA, OFFICE	9. WELL NO  10. FIYLD AND POOL, OR WILDCAY  SCOGGIN DRAW- NORROW  11. SEC., T., R., M., OR BEK, AND NURVEY OR ABKA
14. PERMIT NO.	15. ELEV. TIONS (Show whether 360) 7° G L	·	12-18-27- NMPM 12 COUNTY OR PARINH 13. STATE EDDY N.M.
TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE REPAIR WELL (Other)  17. In scribe encrosed or comproposed work. If well nent to this work.)  O. Cha Origo On 7-22-73, C 1955 W/7  Tey tu WO2 Old O. K.	Check Appropriate Box To Indicate  FOR INTENTION TO:  PULL OR ALTER CASING MULTIPLE COMPLETE ABANDON* CHANGE PL. NS  PLETED OPERATIONS (Clearly state all pertins directionally drilled, give subsurface low  Source of the subsurfa	water shut-off  Fracture treatment shooting or acidizing (Other)  (Note: Report result Completion or Recompent details, and give pertinent dates and measured and true vertice.  Add 3: PM 7-18-  K-55 Casing L+ 100 SU Mean  Casing W/ 500	REPAIRING WELL ALTERING CASING ABANDONMENT  Sof multiple completion on Well altering estimated date of starting any and depths for all markers and zones perting.  73.  Was Det  7. Cinc. 200 Sa.  PS. for 30 min.
•			RECEIVED

U. S. GEOLOGIONAL SURVEY ARTESIA, NEW MEXICO TITLE ADMINISTRATIVE ASSISTANT DATE JUL 2 3 1973 O 4- USGS- PAR ADDITION TITLE

JUL24 1973

1- DIV 1- SUS P 1- RRY 1- ARCO

ACTING DISTRICT ENGINEER \*See Instructions on Reverse Side

RECEIVED

AUA: 1 1973

#### Drawer 1857 Boswell, New Mexico 88201

D. C. C.

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 lesses 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 Wig 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: 15

RECEIVED

JUL 23 1973 V. S. 680LOGIDAL SURVEY ARCESIA, NEW MEXICO Form 9-330 (Kev. 5-63)

SUBMIT IN DUPLIC. 24 UNITED STATES DEPARTMENT OF THE INTERIOR

(See other instructions on reverse side) Form approved. Budget Bureau No. 42-R355.5.

5. LEASE DESIGNATION AND SERIAL NO.

**GEOLOGICAL SURVEY** NM-6852 6. IF INDIAN, ALLOTTEE OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG\* 1a. TYPE OF WELL: OIL WELL GAS WELL 7. UNIT AGREEMENT NAME DRY A Other DIFF. RECEIVED b. TYPE OF COMPLETION: DIAMOND FED. GAS COM WORK DEEP- OVER EN PLUG DACK NEW WELL 2. NAME OF OPERATOR Amoco Production Company SEP 2 4 1973 9. WELL NO. 3. ADDRESS OF OPERATOR
BOX 68, HOBBS, N. M. 88240 10. FIELD AND POOL, OR WILDCAT 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements 1980 FNL X 660 FWL Sec 12. (UNIT F, SE/4 NW/4) NMPM 12-18-27 At total depth EDDY 13. STATE 14. PERMIT NO. DATE ISSUED N.M. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.) 8-27-73 3623 RDB P4A 0-TD WAS DIRECTIONAL SURVEY MADE NONE No ELL CORED -DUAL IND CASING RECORD (Report all strings set in well) TH SET (MD) HOLE SIZE AMOUNT PULLED 878 *80*0 5x NONE LINER RECORD 30 TUBING RECORD BIZE TOP (MD) BOTTOM (MD) BACKS CEMENTS SCREEN (MD) SIZE DEPTH SET (MD) PACKER SET (MD) 31. PERFORATION RECORD (Interval, size and number) ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED 33.\* PRODUCTION WELL STATUS (Producing o shut-in) DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump) DATE OF TEST HOURS TESTED CHOKE SIZE PROD'N. FOR TEST PERIOD OIL-BBL GAS-MCF. FLOW. TUBING PRESS. CASING PRESSURE GAS-MCF. 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) 35. LIST OF ATTACHMENTS 36. I hereby certify that the toylegoing and attached information is complete and correct as determined from all available records makum

SIGNED .

TITLE ADMINISTRATIVE ASSISTANT

DI3- USGS-ARA

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

1- W7 1- DIV

1- RRY

# INSTRUCTIONS

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 laws on Items 22 and 22 and 22 and 22 and 22 area and practices, either the regard to local, area, or regarding separate reports for separate empletical by, or may be obtained from, the local Federal and/or State this first the first summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments

Mould be listed on this form, see item 33.

Hem 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 for Federal offine for specific instructions.

There is a limitate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Hem 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.

Hem 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.

Hem 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

TRUE VERT. DEPTH TOP MEAS. DEPTH GEOLOGIC MARKERS TEAWL JOLFCA IESTE ABO 1360 , 4, MAME 38 CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING AND SHUT-IN PRESSURES, AND RECOVERIES DESCRIPTION, CONTENTS, ETC. BHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF. DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING BOTTOM 37. SUMMARY OF POROUS ZONES TOP FORMATION ADMIHISTR remod ban another

871-233

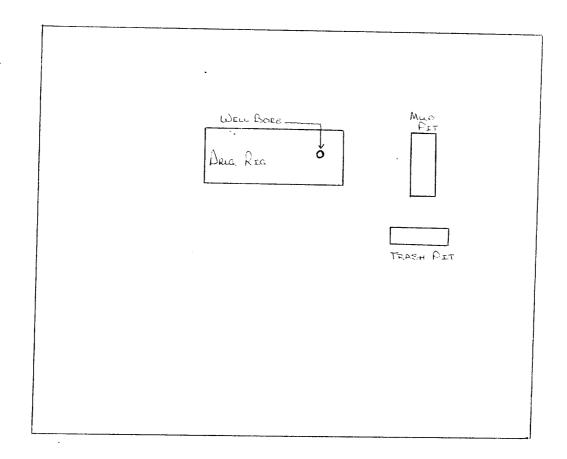
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cho not uso	SUNDRY NOTICE	S AND REPORTS	back to a different reservoir.	6. IF INDIAN, ACROST STREET STATE
9 NAME OF OPERA		DRILLING - J	DRY HOLE RECEIVED	DIAMOINO FECTORLÓR, COR
4. Arion of wi See also space ' At surface	SSS, N. M. 88240	Sec. 12 (Unit 6	SEP 1 2 1973  D. C. C.  ARTESIA, OFFICE  E, SE/4 NW/4	9. WELL NO.  10. FIELD AND PHOLOGICAT  SCOGGIN DICH STILLEGAT  11. SEC., T., R., M., OLLEGA AND SURVEY OR AREA  12-18-27 N. N. J. D. D.
14. FERMIT NO.		15. ELEVATIONS (Show whether		12. COUNTY OF PARISH 13. STATE  EDDY N.M.
FREWATER S FRACTURE TRE SHOOT OR ACH BEPAIR WELL Other)  17. Id.Se RIBE PROPO- proposed wo nent to this WILLLAW WILL WILLLAW WILL WILL WILL WIL	AT MUIDIZE ABA CHA USED OR COMPLETED OPERATOR. If well is directional	L OR ALTER CASING LTIPLE COMPLETE NDON* INGE PLANS CIONS (Clearly state all pertin lly drilled, give subsurface loc	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZIN (Other) (Note: Report Completion or R ent details, and give pertinent cations and measured and true  Without lnc	results of multiple completion on Well tecompletion Report and Log form.) dates, including estimated date of starting any vertical depths for all markers and zones perti-
				<del></del>

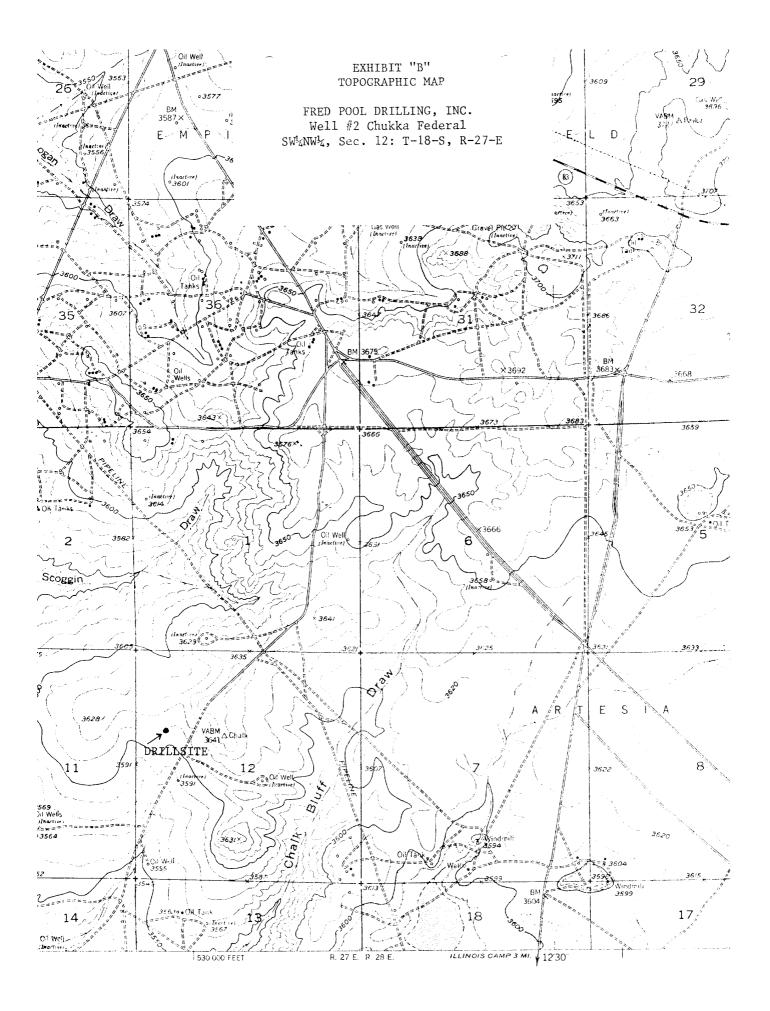
-	ify that the foregoing is true and c	TITLE AREA ENGINEER	DATE AUG 3 : 1973
	for Federal or State office use)		
APPROVED		O TITLE	DATE
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	N.	M. O. C. C. Car	Capy 421
Form 9-331 (May 1963) DEPA	UN D STATES RTMENT OF THE INTER	SUBMIT IN TRIPI	Form pl. sved. 5. Lease Designation and Serial NO. NM- 6852
SUNDRY N (Do not use this form for Use "AP	IOTICES AND REPORTS proposals to drill or to deepen or plu PLICATION FOR PERMIT—" for such	ON WELLS g back to a different reservoir. proposals.)	6. IF INDIAN, ALLOTTEE OR TRIBE NAV
OIL CAS WELL OTE  2. NAME OF OPERATOR		PECETVE: HOLE SEP - 6 1974	7, UNIT AGREEMENT NAME  OAMOND FED. GAS C  FARM OR LEASE NAME
Amoco Production C	ompany -	SEF 01374	9. WELL NO.
DOY AR HORRS N M	38240	O. C. C.	
At surface	o FWL Sec. 12 (UN	`	SCOGGIN DRAW-MOR  11. BEC, T., R., M., OR BLE. AND  BURVEY OR AREA
14. PERMIT NO.	15. ELEVATIONS (Show whether	DF, RT, GR, etc.)	12, COUNTY OR PARISH 18, STATE
	3623	R.D. B.	EDDY KI
	k Appropriate Box To Indicate		or Other Data
FRACTURE TREAT SHOOT OR ACIDIZE	PULL OR ALTER CASING MULTIPLE COMPLETE ABANDON®	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING	REPAIRING WELL
(Other)	CHANGE PLANS	(Other) (Nore: Report r Completion or Re	esults of multiple completion on Well ecompletion Report and Log form.)
• • //	ubandonmend nd Ubandone Interval 9775- 976 7535-743	LENGTH 5 100	Cluded 8-31-13. 15: FORMATION MORROW CLOCO
40 50 40 10	5556-545 3720-366 2045-194 Surface ! els filled UY! s be cleane	56 /00' 20 /00' 5 878" (5A	1995 - eur marker
Location t	s be cleane	d é levelle	N. RECEIVE
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$\bigcap$ $\bigcap$			
18. I hereby certify that the fore	going is true and correct  ADALLIM TITLE	dministrátive ássistai	VT DATE SEP 5 1973
(This space for Federal or 8)	ate office use)		
APPROVED BY	OVED TITLE		DATE CONTROL OF THE PROPERTY O
1- USGS- ALET COLD	is 1974	•	<b>3 £</b> 5 - 1
1- DIV \ ) >5/2	10	ions on Reverse Side	

# EXHIBIT "D" SKETCH OF WELL PAD

FRED POOL DRILLING, INC. Well #2 Chukka Federal SW<sup>1</sup>4NW<sup>1</sup>4, Sec. 12: T-18-S, R-27-E





#### SUPPLEMENTAL DRILLING DATA

FRED POOL DRILLING, INC.
WELL #2 CHUKKA FEDERAL
SW4NW4, 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:

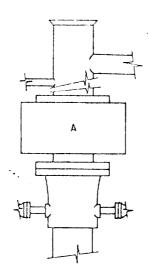
Water - Above 300' Oil - 1500-2500'

4. CASING DESIGN:

 $\frac{\text{Size}}{8\ 5/8"} \qquad \frac{\text{Interval}}{0\ -\ 2000"} \qquad \frac{\text{Weight}}{32\#} \qquad \frac{\text{Grade}}{}$ 

- 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 SW<sup>1</sup>2NW<sup>1</sup>4, Sec. 12, T-18-S, R-27-E EDDY COUNTY, NEW MEXICO



ARRANGEMENT A

#### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

#### DIL 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 Unit Letter Section Township Range County Ε 12 18-S 27-E Eddy Actual Footage Location of Well: feet from the North 660 West line and feet from the line Ground Level Elev. Producing Formation Dedicated Acreage: 3607 Artesia 40 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 X 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. President 660' Fred Pool Drilling, Inc. 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 some is true and correct to the best of my knowledge and belief. Date Surveyed Registered Professional Engineer and/or Land Surveyor Certificate No. 1320 1650 1980 2310 2000 1500

1000

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REadily and pro	UNIT	NM OIL CONS. ( Drawer DD ED+STATES.	(Other instru reverse s	ctions on ide)	Budget Burea	1 No. 42-R142
		OF THE INTER	ŔſĠŔ	ĺ	5. LEASE DESIGNATION	AND SERIAL NO.
AUG 3 0 1985	GEOLO	GICAL SURVEY			NM-6852	
APPLIGATION	OR PERMIT T	O DRILL, DEEP	EN, OR PLUG E	BACK	6. IF INDIAN, ALLOTTE	OR TRIBE NAME
ARTESIA, OFFICE	X	DEEPEN	PLUG BA	ск 🗌	7. UNIT AGREEMENT N	AME
b. TYPE OF WELL OIL [77] G.	AS 🗆 🕜	, s	ingle Multip	PLE [	8. FARM OR LEASE NA	d F
OIL X G. WELL X W. 2. NAME OF OPERATOR	ELL OTHER /	enter "	ONE LX ZONE		_, ,, _ ,	_
Fred Pool Dri	lling, Inc.				Chukka Feder 9. WELL NO.	<u>aı</u>
3. ADDRESS OF OPERATOR		Providental April 19			2	
	3, Roswell, N.M				10. FIELD AND POOL, O	WILDCAT
<ol> <li>LOCATION OF WELL (R At surface</li> </ol>	eport location clearly and	in accordance with any	State requirements.*)	X	Artesia dil	Pool
1980' FNL & 6			(77 11 77)		11. SEC., T., R., M., OR I	
At proposed prod. zor	ı <b>e</b>		(Unit E) (SW\NW\)		Coo 10 m 1	מ_פי ה סיי
14. DISTANCE IN MILES	AND DIRECTION FROM NEAR	EST TOWN OR POST OFFIC			Sec. 12, T-1	0-5, K-27   13. state
ll air miles	east-southeast o	of Artesia, N.M	ſ <b>.</b>		Eddy	NM
15. DISTANCE FROM PROPO LOCATION TO NEARES	OSED* T		O. OF ACRES IN LEASE		F ACRES ASSIGNED	·=::
PROPERTY OR LEASE I (Also to nearest drip	LINE, FT.	660'	160	l l	40	
<ol> <li>DISTANCE FROM PROF TO NEAREST WELL, D</li> </ol>	RULING, COMPLETED.		ROPOSED DEPTH	20. ROTAL	RY OR CABLE TOOLS	
OR APPLIED FOR, ON TH	IS LEASE, FT.	1650'	1945'	<u> </u>	Rotary	
21. ELEVATIONS (Show wh 3607					22. APPROX. DATE WO	BK WILL START
23.		PODOSED GASING AN	D CEMENTING PROGR	A 3.5	0-31-03	
				AM. 		
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	-	QUANTITY OF CEME:	it
12/4" 210	8 5/8"	32#	2000	_Circ		
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	for goods.		1 .	1		
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			OTD:	0,372		
				,	-	
	ttached are: 1	Well locatio	n & acreage dec	dication	ı plat	
	2)	) Supplemental	on & acreage dec . drilling data	dication	n plat	
	2) 3)	Supplemental Surface use	drilling data plan	lication	n plat	
	2) 3) 4)	<ul><li>Supplemental</li><li>Surface use</li><li>Designation</li></ul>	drilling data plan of operator		* with	
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\*See Instructions On Reverse Side

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

DEPART	LTED STATES MENT OF THE INTER	SUBMIT IN TR. ICAT (Other instructions on gerse side)	
SUNDRY NOT  (Do not use this form for propo Use "APPLIC.	ICES AND REPORTS.  Pals to drill or to deepen or plug ATION FOR PERMIT—" for such	ON WELLS  backter different regryoff.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
OIL GAS WELL OTHER  2. NAME OF OPERATOR		<b>SEP 11</b> 1985	7. UNIT AGREEMENT NAME  8. FARM OR LEASE NAME
FRED POOL DRILLING. ADDRESS OF OPERATOR	G, INC.	O. C. D. ARTESIA, OFFICE	Chukka Federal  9. WELL NO.
P. O. Box 1393  LOCATION OF WELL (Report location of See also space 17 below.) At surface		3201 y State requirements.*	10. FIELD AND POOK OR WHIDCAT
1980 ØNL 660 Unit E SW½ NW¾	FWL		Artesia 61 Pool- 11. sec., T., R., M., OR BLE. AND SURVEY OR AREA Sec. 12-T 18S- R 27E
14. PERMIT NO.	15. ELEVATIONS (Show whether I	DF, RT, GR, etc.)	12. COUNTY OR PARISH 13. STATE Eddy NM
6. Check Ap	propriate Box To Indicate	Nature of Notice, Report, or	
TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE	PULL OR ALTER CASING MULTIPLE COMPLETE ABANDON* CHANGE PLANS	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING (Other) (NOTE: Report resu	REPAIRING WELL ALTERING CASING ABANDONMENT*  Its of multiple completion on Well upletion Report and Log form.)
Tag bac wat	k to 1804 ft.; c er.	t to 50 ft. at 1912 ft. Púlle circulated hole want	ith fresh
			92003 1000
8. I hereby certify that the foregoing is	true and correct	<del></del>	grand the second second
SIGNED Senta (	fool TITLE	Clerk	DATE 9-6-85
APPROVED BY CONDITIONS OF APPROVAL, IF A	WECOND TITLE		DATE
SEP 10			

\*See Instructions on Reverse Side

CAPITAAD, NELL WILKICO

(May 1963)  U ED STATES  DEPARTMENT OF THE IN  GEOLOGICAL SURV	VIETED DOther Instructio on re-	Form approved. Budget Bureau No. 42-R1424  5. LEASE DESIGNATION AND SERIAL NO.  NM 6852
SUNDRY NOTICES AND REPO (Do not use this form for proposals to drill or to deepen of the Company	ORTS ON WELLS or plus back tREGENEEMIT. or such proposals.)	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
oil GAS OTHER re-entry	<b>SEP 1</b> 8 1985	7. UNIT AGREEMENT NAME
Fred Pool Drilling, Inc.  3. ADDRESS OF OPERATOR	O. C. D.  ARTESIA, OFFICE	8. FARM OR LEASE NAME Chukka Federal 9. WELL NO.
P.O.Box 1393 Roswell, N.M. 88 LOCATION OF WELL (Report location clearly and in accordance v See also space 17 below.) At surface  1980 FNL 660 FWL Unit E SW½ NW½	201 with any State requirements.*	2 10. FIELD AND POOL, OR WILDCAT  Artesia Oil Pool 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
14. PERMIT NO. 15. ELEVATIONS (Show will 3001520894 3607 GR	hether DF, RT, GR, etc.)	Sec, 12-T18S-R27E  12. COUNTY OR PARISH 13. STATE Eddy NM,
	cate Nature of Notice, Report, or O	ther Data
TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE ABANDON* AEPAIR WELL (Other)  17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all proposed work. If well is directionally drilled, give subsurfament to this work.)*	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING X  (Other) (NOTE: Report results of	REPAIRING WELL  ALTERING CASING  ABANDONMENT*  of multiple completion on Well  tion Report and Log form.)  neluding estimated date of starting any depths for all markers and zones perti-
September 8,1985		÷
Perforations: 1446-56 ft 14 shots. Acidized with 1000 gallor gallons Versagel; 30,000 12,000 # 10/20 sand.	ns NE 15%; and30,000	
Pumping well back to tes	t.	Se. 3. 703.
18. I hereby certify that the foregoing is true and correct SIGNED Senta Oral TITLE	Vice - president	DATE 9-11-85
(This space for Federal or State office use)  APPROVED BY ACCEPTED FOR RECORD  TITLE CONDITIONS OF APPROVAL, AS ANY		DATE

SEP 16 1985

\*See Instructions on Reverse Side

CARISRAD, NEW MEMICO

		_		awer :						45
RECEIVED B		UNITED					V DUCATE	r in-	Form Budget	approved. t Bureau No. 42-R355.5.
SEP 23 1985	DEPAR	TMENT C				₹	structions reverse s		ESIGNA	TION AND SERIAL NO.
								NM 68		OTTEE OR TRIBE NAME
•		OR RECO	MPLETI	ON	REPORT	A٨	ID LOG*	G. IF INDIA	N, ALL	OTTEE OR TRIBE NAME
12 RTESTA O DIFFE	L: OH	GAS WELL	DI	RY 🗌	Other RE-	en	try	7. UNIT ACI	REEMER	NT NAME
b. TYPE OF COM NEW WELL	WORK DE	EP- PLOG	DIFF					8, FARM OR		
2. NAME OF OPERA	OVER L EN	BACK	REST	/R	Other				_	
		lling, Ind	/		5	i.		9. WELL NO		Federal
3. ADDRESS OF OPE					~ ~ .	11.74°,	1.1.		2	
4. LOCATION OF WE	Box 1393	Roswe]	1, N.	M. 88	201 u State requir	com on	# <b>a</b> \#	10. FIELD A	. 6	2.600
		O FWL SV				*.				OIL POOL
	terval reported b		1.4 1411.4	011	Tr D			OR AREA		
1446- ft							. • • • •	Sec. 1	2 <b>-</b> T	18S-R27E
1912 ft.			14. PE	RMIT NO.		DATE	ISSUED	12. COUNTY	OR	13. STATE
1912 11.			3001	15208	Ţ		30-85	PARISH Eddy		NM
15. DATE SPUDDED	16. DATE T.D.	1	TE COMPL. (	Ready t				KB, RT, GR, ETC.)*	19.	ELEV. CASINGHEAD
8-30-85 20. TOTAL DEPTH, MD	9-6-85	9- ug, back t.d., md a	10-85				07 GR		<u> </u>	3607 GR
	1.0	ug, васк т.в., мв а 912. ft	22.	HOW M	TIPLE COMPL.	'	23. INTERVA	BY	)LS	CABLE TOOLS
1912 ft.	RVAL(S), OF THIS	COMPLETION—TO	P, BOTTOM,	NAME (I	AD AND TVD)*		<u> </u>	) X	1 2	25. WAS DIRECTIONAL
1446-146	52 ft.									SURVEY MADE
Penrose										No
26. TYPE ELECTRIC									27. v	WAS WELL CORED
28.	ted Neut		ING RECO	RD (Ren	ort all strings	set i	n soell)			no
CASING SIZE	WEIGHT, LB.				LE SIZE			ING RECORD		AMOUNT PULLED
8 5/8	32#_	2000		1	11		circula	ted		0
					· · · · · · · · · · · · · · · · · · ·		······································	<del></del>		
29.	<del></del>	LINER RECORI	)	····			30.	TUBING REC	ORD	<u> </u>
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CE	MENT*	SCREEN (MI	o)	SIZE	DEPTH SET (M	(D)	PACKER SET (MD)
			-				2 3/8	1804 ft	-	
31. PERFORATION REG	CORD (Interval, a	ize and number)	!		32.	AC	ID SHOT ER	ACTURE, CEMEN	T 901	PUZE EEC
1/// 5/	<i>c.</i>				DEPTH INT			AMOUNT AND KIN		
1446-56 1459-62		holes			1446-	56	1	000 gal.	NE	15%, 30,000
1439 02	LL				1459-	62	g	1		
									:12	,000# 10/20
33.*	· · · · · · · · · · · · · · · · · · ·			PROI	UCTION		l s	and.		
DATE FIRST PRODUCT	ION PROD	UCTION METHOD (	Flowing, ga			ind t	ppe of pump)			S (Producing or
9-12-8		mping						Pr	t-in) odu	cing
O-12-05	HOURS TESTED	CHOFE SIZE	PROD'N. TEST P	FOR	OIL-BBL.		GAS-MCF.	WATER—BBI	.	GAS-OIL RATIO
$\frac{9-12-85}{\text{flow. TUBING PRESS.}}$	24 CASING PRESSU		OIL—B	BL.	31	igra	TSTM	()	OIL G	RAVITY-API (CORR.)
40#	40#	24-HOUR RAT	re	31		TM		ECORD	3	
34. DISPOSITION OF G		tuel nented etc	<del></del>		1 11		9 N	<u> </u>		

TITLE Vice President

DATE 9-13-85

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

Compensated Neutron log, mailed 9-10-85

vented 35. LIST OF ATTACHMENTS 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 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 forms and items 22 and 23, 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 than the first form, see irem 3.

If most first of this form, see irem 3.

If most first of this form, see irem 3.

If most first of this form, see irem 3.

If most form are the supplicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State laws and regulations. All attachments or Federal office for specific instructions.

If most law in the supplicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Indian land show the grades of multiple completion, so state in item 24 show the producing from more than one interval.

If most supplicable state report (page) on this form, adequately produced, showing the additional data pertinent to such interval.

If most supplies the separately produced, showing the additional data pertinent to such interval.

If most supplies the supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing ton this form for each interval to be separately produced. See inst

DEPTH INTERVAL	rearen, cushing	CAED, TIME TOUL O	DEPTH INTERVAL TESTED, CUSHION UNED, TIME TOOL OPEN, PLOWING AND SHUT-IN PRESSURES, AND RECOVERIES	38. GEUI	GEULUGIC MARKERS	
FURMATION	TOP	ROTTOM	DESCRIPTION, CONTENTS, ETC.		Ĥ.	TOP
	(			NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Queen &	0 65 1100 1365	65 1100 1365 1570	Caliche and red bed Salt, red bed and anhydrite. Dolomite and anhydrite Sand dolomite			
TD TD	1570	1912	dolomite			
						:

Disastas 11

Penta Poal
(Signature)
Vice President
(Title)
9-16-85
(Date)

	TITLE	Supervisor District Li
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This form is to be filed in compliance with null 1104,

If this is a request for silowable for a newly drilled or deep well, this form must be accompanied by a imbulation of the deviatests taken on the well in accordance with NULE 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 ov. 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.

RECEIVED BY 0CT 3 - 1985

O. C. D.

#### FRED POOL, JR.

September 25,1985

P. O. Box 1393 Roswell, NM 88201

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

#### 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

DISTRICT SUPERVISOR

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Form 3160-5 (November 1983) (Formerly 9-331)	U TED STA DEPARTMENT OF TH BUREAU OF LAND MA	IE INTERIOR Term	MIT IN TI ICATE* er lustruct. on re- e side)		085
SUND!	RY NOTICES AND R m for proposals to drill or to d se "APPLICATION FOR PERMI"	EPORTS ON WE	LLS intereut reservoir.	6 IF INDIAN, ALLOTTER OR TR	IBE NAME
OIL X GAS WELL	/		RECEIVED	7. UNIT AGREEMENT NAME	-
WELL WELL	OTHER			8. FARM OR LEASE NAME	
THE EASTLAND O	L COMPANY /		OCT 19 '90	CHUKKA FEDERAL	
P. O. DRAWER 34 4. LOCATION OF WELL (Report See also space 17 below. At surface UNIT LETTER E,	88, MIDLAND, TX 797 rt location clearly and in accord	lance with any State requi		2 10. FIELD AND POOL, OR WILDO ARTESIA Q-G-SA 11. SEC., T., B., M., OR BLK. AND SURVEY OR AREA	
RG. 27E, EDDY (	O., NM			SEC. 12, TWP 18S,	RGE. 27E
14. PERMIT NO. 30-015-20894	15. ELEVATIONS (S	Show whether DF, RT, GR, etc.	)	12. COUNTY OR PARISH 13. 8	
16.	Check Appropriate Box T	o Indicate Nature of	Notice, Report, or C	Other Data	
NOT	CE OF INTENTION TO:		8UBS#QI	UENT REPORT OF:	
TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE REPAIR WELL (Other)	PULL OR ALTER CASI MULTIPLE COMPLETE ABANDON* CHANGE PLANS	FRA	CTUBE TREATMENT OUTING OR ACIDIZING OHER) CHANGE OF OIL	BEFAIRING WELL  ALTERING CASING  ABANDONMENT*  PERATOR  of multiple completion on Well  letion Report and Log form.)	X
LEASE PURCH	ASED FROM FRED POOL	DRILLING, INC.	09/01/90.		
				0c AR	
		*		<u> </u>	
		$\mathcal{U}$	41.4 (1.5.6) 21	7	RECEIVED
			and the second second	09	Aij
		Q.P.	· . ·	90° 188 60	ED
18. I hereby certify that the SIGNED LAUGE	foregoing is true and correct	TITLE PRODUCTION	ON SUPERINTENDE	NT <b>DATE</b> 10/11/90	
(This space for Federal	or State office use)				
APPROVED BYCONDITIONS OF APPRO		TITLE		DATE	

#### \*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.

Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240 DISTRICT II P.O. Drawer DD, Artesia, NM 88210

State of New Mexico Energy, Minerals and Natural Resources Department RECEIVED

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

OIL CONSERVATION DIVISION P.O. Box 2088

OCT 18'90

C. C. D.

DISTRICT III

Santa Fe, New Mexico 87504-2088

REQ	JEST F	OR A	ALLOWAE	BLE AND A	AUTHORIZ	ZATION <sup>181</sup>	ESIA, OFFICE		
	TO TRA	ANSF	PORT OIL	AND NA	TURAL GA	10			
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100		Rang	e 27E	, NI	мрм,				County
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(XX)	or Conde	nsale		Address (Giv	e address to wh	nich approved	copy of this fo	rm is to be sent	)
				BOX 15	9, ARTES	IA, NM 8	00210	em is to be sen	1
chead Gas	X	or Di	ry Gas	BARTLE	SVILLE,	ш <b>п арргочеа</b> ОК	copy of this jo		, 
Unit	l Sec.	Twp.	Rge.				?		
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from any ot	her lease or	pool, g	give comming	ling order numl	ber:				
						Deepen	Plug Back	Same Res'v	Diff Res'v
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				T 01/C	Day		T. L. D. A		
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SPORTER OF OIL AND NATURAL GAS  CHASTING TO TONG GAS Address (Given BARTLE)  Phead Gas A or Dry Gas Address (Given BARTLE)  Line 12 18S 27E Normany other lease or pool, give commingling order number of Producing Formation  TUBING, CASING AND CEMENTI CASING & TUBING SIZE  TUBING, CASING AND CEMENTI CASING & TUBING SIZE  TUBING, CASING AND CEMENTI CASING & TUBING SIZE  TUBING CASING AND CEMENTI CASING & TUBING SIZE  TUBING CASING AND CEMENTI CASING Pressure  Oil - Bbls.  Water - Bbls.  Length of Test Bbis. Conder Size Casing Pressure  Oil - Bbls.  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Printed Name	Title	Title	SUPERVISOR, DISTRICT II	
10/08/90	915/683-6293			
Date	Telephone No.		magnitude and magnitude and the committee on the state of the committee of the committee of the committee of the	k 45 /

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) Senarate Form C-104 must be filed for each pool in multiply completed wells.

#### State of New Mexico Energy, Minerals & Natural Resources

Lottii C-101 Revised March 12, 1999

District II B11 South First, Artesia, NM 88210

Env. Mgr. for Water & Waste

Phone: 50-5-748-3311

CONSERVATION DIVISION Submit to Appropriate District Office

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7-7/		<del> </del>		1/2"		17 lb/ft	9200 fc		Caliper		0%	Surface
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Approval Date: Conditions of Approval:

Attached 🔲

Section Township

12

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27E

<u>District l</u> 1625 N. French Dr., Hobbs, NM 88240

State of New Mexico Energy, Minerals & Natural Resources Department

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Form C-102 Revised March 17, 1999

District [[

811 South First, Artesia, NM 88210

District III

UL or lot no.

1000 Rio Brazos Rd., Aziec, NM 87410 District IV

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505

Submit to Appropriate District Office

State Lease - 4 Copies

AMENDED REPORT

Fee Lease - 3 Copies

2040 South Pacheco, Sunta Fe, NM 87505 WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-20894	Pool Code Lower Wolfcamp-Cisco-Canyon Ir		-Canyon Injection Zone
Property Cude		Property Name WDW-2	* Well Number
OGRID No.		Operator Name Lefining Company	'Elevation 3607' GR

<sup>10</sup> Surface Location County East/West line Feet from the Lot Ida Feet from the North/South line Eddy 660 West 1980 North

**18S** E 11 Bottom Hole Location If Different From Surface East/West line County North/South line Feet from the Feet from the Lot Idn Section Township UL or lot no. Consolidation Code Order No. Joint or Infill Dedicated Acres

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A

	NON-STANDA	ard unit has been	A APPROVED BY TH	E DIVISION
<b>*</b>				17 OPERATOR CERTIFICATION
				I hereby certify that the information contained herein is true and
				complete to the best of my knowledge and belief
	j	1		
1980'				
1960				
				Signature
				Printed Name Darrell Moore Tille Env Mgr. for Water + Waste
<b>1</b>				
← 660'→ •				Printed Name Darrell Moore
1				at in the A
				Tille Env Myr. for Water & Wasle
				Date 4/21/99
				"SURVEYOR CERTIFICATION
<b>[</b>				I hereby certify that the well location shown on this plat was
	1	· ·		placed from field notes of actual surveys much by me
				or under my supervision, and that the same is true and correct to
				the best of my belief.
i l				
[ \				
8				Date of Survey
<b> </b>			, , , , , , , , , , , , , , , , , , , ,	Signature and Seni of Professional Surveyer:
1				Well is active. Location was not re-surveyed by
1			:	Navajo.
				-
1				Į.
				Certificate Number

### 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	OCA SAX	748-9720
From: 2/Ayu	E PRICE - OCD	5 F	
Date: 4/3	0/99		
Number of Pa	ges (Includes Cover Sheet		6
Message:/	PPRIVED BOND FOR	MAUNTO	WBW#2
CLASS I	INSECTION WELL	(COPY)	
<del> </del>			
If you ha	ve any trouble rece	eiving this.	nlease call·

(505) 827-7133

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

Guif Insurance Company, Surety Bond 58 96 12

The New Mexico Oil Conservation Division hereby approves the above-captioned One-Well Plugging Bond.

SiAcerely

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

2.6

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. Dary Simpa

SGS:emb

**Enclosure** 

cc: Navajo Refining Company

Post Office Box 159

Artesia, New Mexico 88211-0159

Attention: Mr. Joe Akins - Copy of Bond & Invoice

OVER 30 YEARS

PRINCIPAL Post Office Box 1		SURETY		
Artesia New Mey I	.39 <u>1</u> .00 99311-015	01 South Fourth	Street	
Artesia, New Mexi	77 00ZII-013	7 ATTEBLA. New	Mexico 88210-2	195
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Signature Presid		V Accorney-	In-Fact	
Title	ent	/		
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(Note: Principal, if corporate seal here		Note: Corporate surety here.)	affix corporate seal	
				- ~
	ACKNOWLEDGENERY FOR	M FOR NATURAL PERSONS		
STATE OF				
COUNTY OF		•	•	
On this				
On this	day of	, 19, be	fore me personally	appeared
executed the foregoing ins	to se kn	own to be the person	(persons) described	n and who
free act and deed.		ranken funt be (Syeh) t	xecuted the same as h	is (their)
IN WITHESS WHEREOF, I	have hereunto set m	y hand and seal on the	day and year in this	ertificara
first above written.			Jone WH FRID C	
	-			
		Notary Public		
My Commission Expires				
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#### POWER OF ATTORNEY

# KNOW ALL MEN BY THESE PRESENTS:

30th

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 surely, any and all bonds and undertakings of surelyship., 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 affective July 1, 1983, and now in full force and effect:

Thesoficed that the President, or any Sonior Vice President, or any Vice President, or any Assistant Secretary, or any Assistant Secretary may appoint Alternary-in-fact in any stole, tentiory or Indered district to represent this Company, and to act on its behalf within the scope of the authority granted to them, in writing, which authority the power to make, execute, seal and deliver on behalf of this Company, as surely, and so its act and deed, any and all bonds and undersatings of authoriship and other documents that the ordinary course of surely business may require, including authority to appoint against for the service of precision any jurisdiction, state or federal, and authority to altest to the signature of the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary, or any alternative and the authority granted him sevoted by the President, or any Senior Vice President, or the Secretary, or any Assistant Secretary, or the Secretary, or any Assistant Secretary, or the Secretary, or any Assistant Secretary, or by the Board of Directors.

This Power of Altorney 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 this 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 efficied by Secretary or of any Assistant Secretary, and the seal of the Company may be efficied by Secretary or of any source of allowing or to any certificate relating thereto appointment of the proposes only of executing and aftersor points and undertakings and other writings obligatory in the nature of the service of any such power of allowing and certificate revoluting the authority of the foreigning Attempty-in-fact, as well as for the appointment of agents for the service of process in any jurisdiction, and the company and sample of the service of such and the service of allowing any such power of attempty or conflictate persisted by such locativing signature and laccoming service and and binding upon the Company and any such service of attempty or conflictate are descured and any fine of the process of the service of attempting to which they are established.

of, 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.

Sr. Vice President

1801 before me, a Notary Public of the State and County sloresaid, reading therein, duly commissions above famed officer of GLCF infoUNDECCOMPANY, who being by the first duly swom according to law, did depose and say their he is that officer of the company described in one famed officer is the company of the control of the company of the control of the company of the said of the company; that the seal affined to such instrument is the componers seal of said company; and that he company and the said instrument by the authority and decease of said company.

seyol June

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 precious distributions are true and correct transcripts from the records of GULF INSURANCE COMPANY and that the above named officer was on the date correct transcripts from the records of GULF INSURANCE COMPANY and that the above named officer was on the date correct transcripts from the records of GULF INSURANCE COMPANY and that the above named officer was on the date

rereunto subscribed my name and strated the corporate seal of Gull Insurance Company this

22nd day of April

.1999.

Les No-liney Acchiel
Vice President

#### STATE OF NEW MEXICO

#### ONE-WELL PLUGGING BOND

FOR CHAVES, EDDY, LEA, MCKIMLEY, RIO ARRIBA, ROOSEVELT, SANDOVAL, AND SAN JUAN COUNTIES ONLY

BOND NO. 58 96 12
ANOUNT OF BOND \$95,000.00
COUNTY Eddy

NOTE: For wells less than 5,000 feet deep, the minimum bond is \$5,000.000 For wells 5,000 to 10,000 feet deep, the minimum bond is 97,500.00\* For wells more than 10,000 feet deep, the minimum bond is \$10,000.00

\*Under certain conditions, a well being drilled under a 85,000.00 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)

KNOW	ALL	MEN	BY	THESE	Percente.

HIR 50 00 IRI 12:00 IH

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knoh all hen bi	THESE PRESENTS:				
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Mexico, as SURE	mard trimin bo	mind unto the State	of New Mexico. 6	or the use sed t	
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coemselves, the	ir successors and assi	gns, jointly and sev	erally, firmly b	y these presents	ı <b>.</b>
The condit	ions of this obligatio	n are such that:			
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	he above principal has tas leases, or helium ca to private individu				
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# 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	Cumulative Time	Pressure		Delta Pressure
(hrs.)	(minutes)	(psig)	(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	Cumulative Time	Pressure		Delta Pressure
(hrs.)	(minutes)	(psig)	(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





TELEPHONE (505) 748-3311

EASYLINK 62905278



# REFINING COMPANY

(505) (505) 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,

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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



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:

The Eastland Oil Company (September 1990 to present)

Lease:

Chukka Federal No. 2

Former Operator:

Fred Pool Drilling Company (August 1985 to September

1990)

Former Operator:

Amoco Production Company (July 1973 to August 1985)

Former Lease:

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 concent

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,

naucy L. niemann Nancy L. Niemann

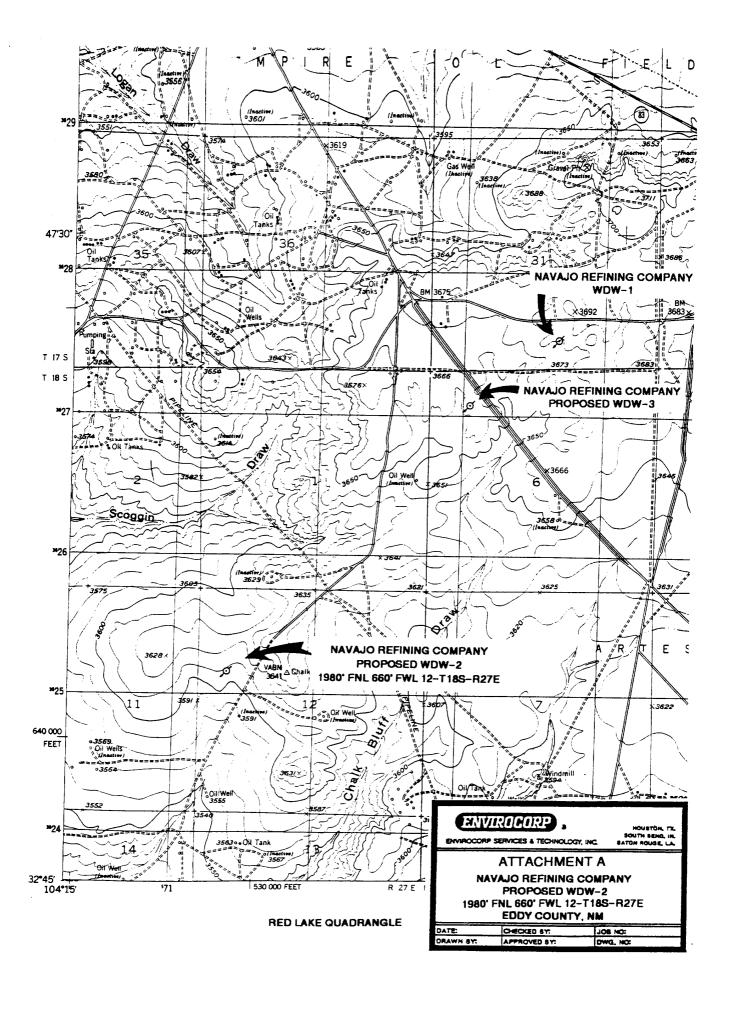
Senior Geologist

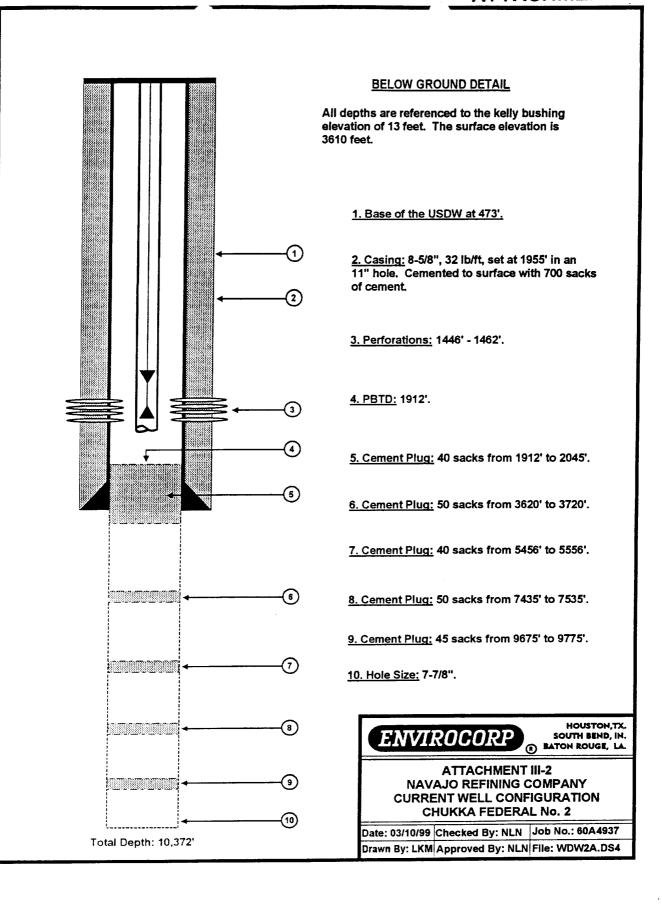
NLN/paf Attachments

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.

355\60a4937\hunt ltr.doc







#### 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

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Subsurface Technology, Inc.

ENVIROCORP ,

# ATTACHMENT C (Continued)

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<sub>2</sub>S 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).

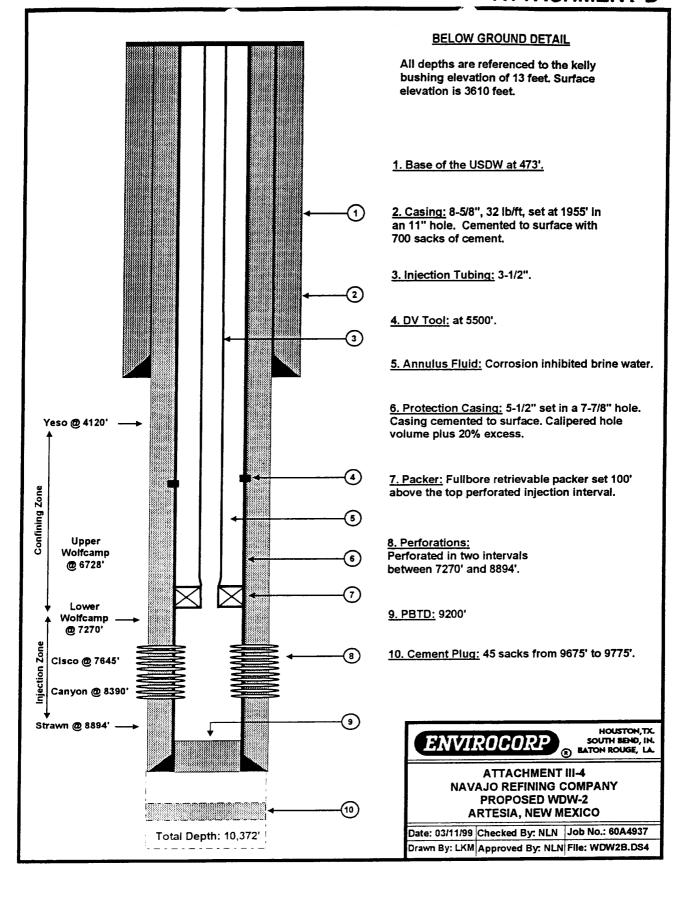
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# **ATTACHMENT C (Continued)**

- 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.





#### 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: <u>NM-6852</u>

#### I. DRILLING OPERATIONS REQUIREMENTS: [Deepening]

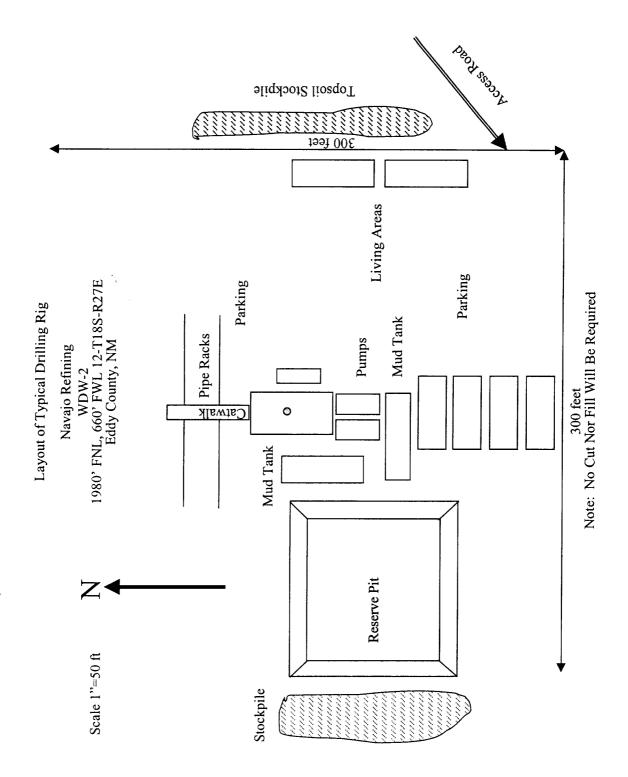
- 1. The Bureau of Land Management (BLM) is to be notified at (505) 887-6544 in sufficient time for a representative to witness:
- A. Cementing casing: 5-1/2 inch
- 2. Unless the injection casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

#### II. CASING:

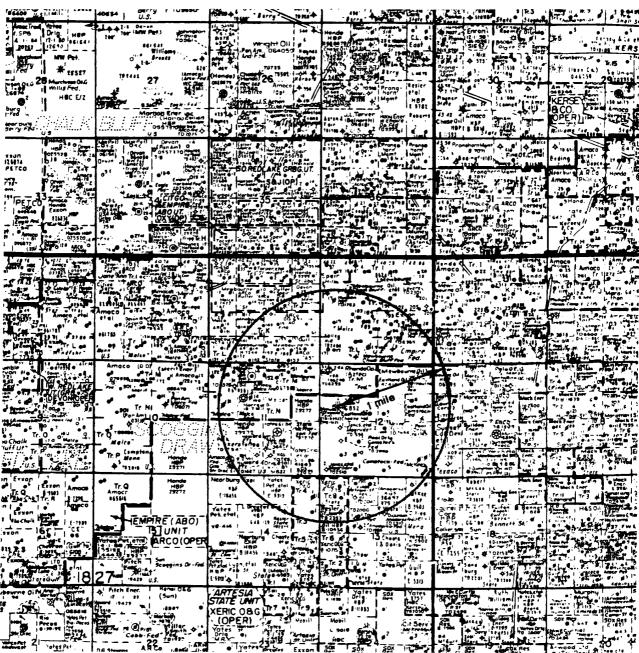
1. Minimum required fill of cement behind the <u>5-1/2</u> inch injection casing is <u>sufficient to circulate to the surface.</u>

#### **III. PRESSURE CONTROL:**

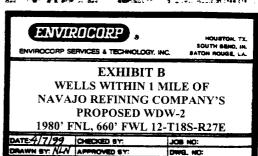
- 1. Before drilling into the 100 foot 8-5/8 inch surface casing shoe cement plug at approximately 1912 feet, the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve
- 2. Minimum working pressure of the blowout preventer 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.

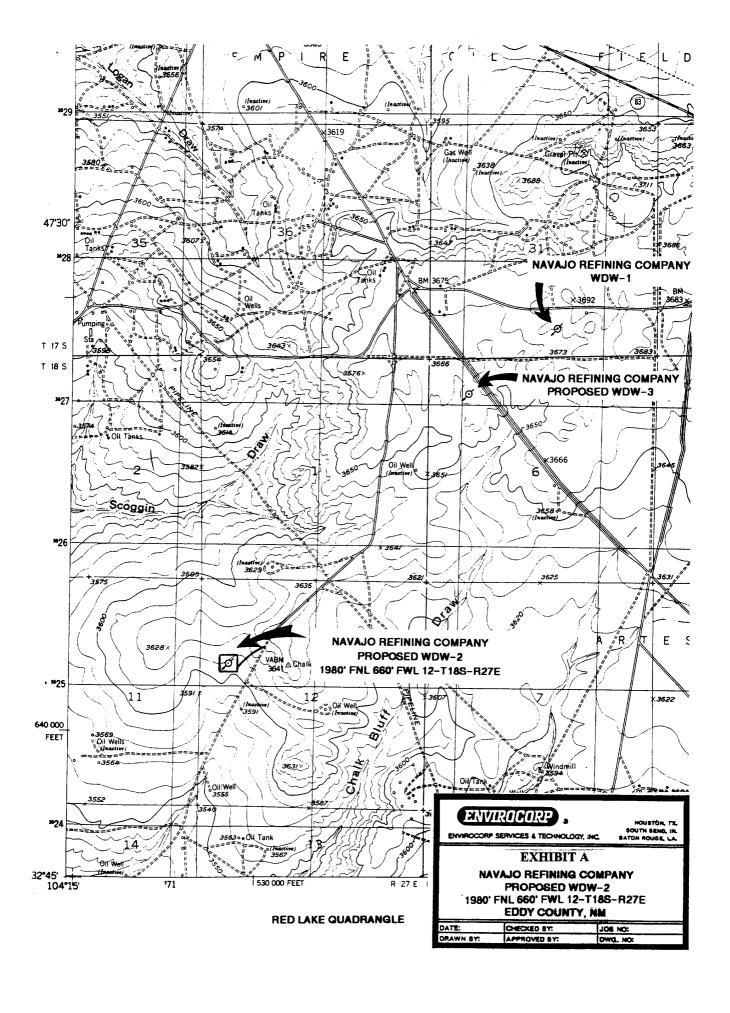


Subsurface Technology, Inc.



Map courtesy of Midland Map Company





#### 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. <u>Location of Existing Wells</u>: Existing wells within one mile of proposed WDW-2 are shown on Exhibit B.
- 4. <u>Location of Proposed Facilities If Well Is Completed</u>: The well will be shut in after completion and testing.
- 5. <u>Location and Type of Water Supply</u>: Water for reentry, testing, and completion operations will be purchased from a commercial water hauler.
- 6. <u>Source of Construction Materials</u>: 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.

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- 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. <u>Archaeological Survey</u>: 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. <u>Operator's Representatives</u>: 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
- 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	Darul More
Date	Name Name
	Env. Mgr. S. Water - Waste
	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:

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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.

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- 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<sub>2</sub>S 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.

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- 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

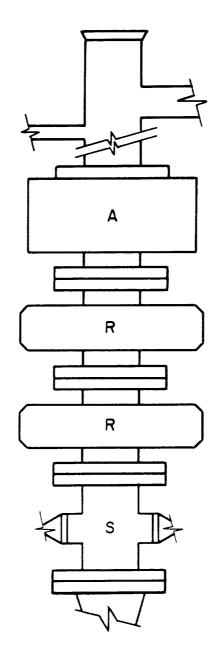
A formation fluid sample will be retrieved from the proposed injection zone in proposed WDW-2. Navajo will conduct injectivity testing in the injection zone of proposed WDW-2.

No coring is planned.

The proposed logging program is described below:

OPEN-HOLE LOGS	CASED-HOLE LOGS
Proposed WDW-2	
	Logs Run in 1973: Gamma Ray
	Logs Proposed on Reentry: Cement Bond/Variable Density Casing Inspection Log
Logs Run on August 27, 1973: Dual Induction-Laterolog/ Spontaneous Potential Compensated Neutron/ Formation Density Caliper Gamma Ray  Logs Proposed on Reentry: Fracture Identification Logs	Logs Proposed on Reentry: Cement Bond/Variable Density Casing Inspection Log Differential Temperature Log Radioactive Tracer Survey
	Proposed WDW-2  Logs Run on August 27, 1973: Dual Induction-Laterolog/ Spontaneous Potential Compensated Neutron/ Formation Density Caliper Gamma Ray

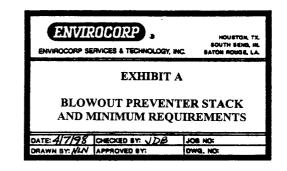




- A = ANNULAR-TYPE BLOWOUT PREVENTER 11-inch throughbore, 3000-psi working pressure
- R = RAM-TYPE BLOWOUT PREVENTER 11-inch throughbore, 3000-psi working pressure
- S = DRILLING SPOOL WITH SIDE OUTLET CONNECTIONS FOR CHOKE AND KILL LINES

MANUAL CHOKE MANIFOLD 3-inch throughbore, 3000-psi working pressure

Source: API RP 53: Recommended Practices for Blowout Prevention Equipment Systems



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Form 3160-3 (July 1992)		NITED STATES	, (0	ther rec	tions on Se)	OMB NO Expires: Pet	PPROVED 0/5/ 1994-9136 Presty 28, 1995
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18. DISTANCE PROM I	drig. unit line, if any)		19. PROPOSED DEPT		20. BOTAR	T OR CABLE TOOLS	··
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nne.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY \_\_

(ORIG. SGD.) DAVID R. GLASS

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 the

PETROLEUM ENGINEER

APR 27 1999

District I

1625 N. French Dr., Hobbs, NM 88240

State of New Mexico Energy, Minerals & Natural Resources Depart at

Form C-102 Revised March 17, 1999

District II District III

811 South First, Artesia, NM 88210

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505

Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

District IV

1000 Rio Brazos Rd., Aztec, NM 87410 2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number 30-015-20894	root code		Pool Name Lower Wolfcamp-Cisco-Canyon Injection Zone	
* Property Code		perty Name DW-2	<sup>4</sup> Well Number	
OGRID No.		erator Name Tining Company	'Elevation 3607' GR	

Surface Location

	UL or lot no. E	Section 12	Township 18S	Range 27E	Lot Idn	Feet from the 1980	North/South line North	Feet from the	East/West line West	Eddy	
ı							15:00 E				

11 Rottom Hole Location If Different From Surface

			DU	tion mon	Location in	Dillorent 1 101			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
							<u> </u>		
Dedicated Acres Joint or Infill Consolidation Code Corder No.									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A

NO ALLOWABLE WILL BE ASSIGNED NON-STA	NDARD UNIT HAS BEEN	APPROVED BY THE	DIVISION
<b>Т</b>			17 OPERATOR CERTIFICATION
		1.	hereby certify that the information comained herein is true and
		a	omplete to the best of my knowledge and belief
1			
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			Daniel Marie
		S	Daniel Moore
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<b>←</b> 660'→		1	Printed Name
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			<sup>18</sup> SURVEYOR CERTIFICATION
			l 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 Surveyer:
			Well is active. Location was not re-surveyed by
1			Navajo.
			iravaju.
			Certificate Number

# 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.

4/15/49	Dauel More Dassell Moore		
Date			
	Env. Mar. So Water - Wast		
	Navajo Refining Company Company		

TELEPHONE (505) 748-3311

> EASYLINK 62905278



# N.M. Oil Cons. Division 811 S. 1st Street ARAN PANY 2230 MPANY

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).

PAR

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

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

mull Moore

Mr. Brian Rogers Subsurface Technology, Inc. 7020 Portwest, Suite 100 Houston, Texas 77024

File: Injection Wells

**APPROVED** 

JUN 02 1999

(ORIG. SGD.) DAVID B. GLASS
AUTHORIZED OFFICER, MINERALS
BUREAU OF LAND MANAGEMENT

SUBJECT TO LIKE APPROVAL BY STATE



# Patterson Drilling Company

410 N. Loraine Street — (915) 682-9401 Midland, Texas 79701

RECEIVED

JUN 0 4 1999

June 2, 1999

SUBSURFACE TECHNOLOGY, INC.

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 2<sup>nd</sup> day of June, 1999 by Rebecca A. Edwards.

MY COMMISSION EXPIRES:

NOTARY PUBLIC

TREVA FORRESTER
NOTARY PUBLIC
STATE OF TEXAS
My Carrent. 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. Penn. "B"		
T. Strawn 8894		T. Penn. "C"		
T. Atoka				
		T. Leadville		
		T. Madison		
T. Silurian		T. Elbert		
T. Montoya	T. Mancos	T. McCracken		
T. Simpson	T. Gallup	T. Ignacio Otzte		
T. McKee				
T. Ellenburger		T		
T. Gr. Wash	T. Morrison	T.		
T. Delaware Sand	T.Todilto	T		
T. Bone Springs	T. Entrada	Т.		
T.	T. Wingate	T.		
- <sub>T.</sub>	T. Chinle	Т.		
- T.	T. Permian	Т.		
T.	T. Penn "A"	T.		
to		OIL OR GAS SANDS OR ZONES		
		to		
to	feet			
Lithology	From To Thick	ness Lithology		
	T. Canyon 8390 T. Strawn 8894 T. Atoka T. Miss T. Devonian T. Silurian T. Montoya T. Simpson T. McKee T. Ellenburger T. Gr. Wash T. Delaware Sand T. Bone Springs T. T. T.  T.  T.  T.  T.  T.  T.  T.	T. Canyon         8390         T. Ojo Alamo           T. Strawn         8894         T. Kirtland-Fruitland           T. Atoka         T. Pictured Cliffs           T. Miss         T. Cliff House           T. Devonian         T. Menefee           T. Silurian         T. Point Lookout           T. Montoya         T. Mancos           T. Simpson         T. Gallup           T. McKee         Base Greenhorn           T. Ellenburger         T. Dakota           T. Gr. Wash         T. Morrison           T. Delaware Sand         T. Todilto           T. Bone Springs         T. Entrada           T.         T. Chinle           T.         T. Permian           T.         T. Permian           T. Penn "A"    IMPORTANT WATER SANDS  Inflow and elevation to which water rose in hole.  to		

Submit To Appropriate District Office State of New Mexico Form C-105 State Lease - 6 copies Fee Lease - 5 copies Revised March 25, 1999 Energy, Minerals and Natural Resources District I WELL API NO. 1625 N. French Dr., Hobbs, NM 87240 District II 811 South First, Artesia, NM 87210 30-015-20894 OIL CONSERVATION DIVISION 5. Indicate Type of Lease 1000 Rio Brazos Rd. Aztec, NM 87410 2040 South Pacheco STATE | FEET Tederal Santa Fe, NM 87505 State Oil & Gas Lease No. NM 6852 WELL COMPLETION OR RECOMPLETION REPORT AND LOG 7. Lease Name or Unit Agreement Name GAS WELL DRY DRY OTHER Class I Waste Disposal Well OIL WELL Navajo Refining Company 1316 Type of Completion WDW-2 WORK DEEPEN DIFF  $\mathbf{X}$ <u>WE</u>LL OVER RESVR 2. Name of Operator 8. Well No Navajo Refining Company WDW-2 3. Address of Operator 9. Pool name or Wildcat -L Wolfcamp-Ci Post Office Box 159, Artesia, New Mexico 88211 l'ermo-4. Well Location Navajo PERM 96918 West : 1980 Feet From The North Line and Unit Letter Feet From The Township 18 South Range 27 East 12 NMPM Eddv Section 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 August 27, 1973 3609 feet GL July 18, 1973 June 8, 1999 3607 feet GL, 3623 feet RKB 15. Total Depth 16. Plug Back T.D. 17. If Multiple Compl. How Many 18. Intervals Rotary Tools 10.372 feet 8770 feet Zones? Drilled By N/A ΑII 19. Producing Interval(s), of this completion - Top, Bottom, Name 20. Was Directional Survey Made L. Wolfcamp-Cisco-Canyon Yes 21. Type Electric and Other Logs Run 22. Was Well Cored Fracture Finder and Caliper Logs, Dual Induction Laterolog, No Compensated Neutron Formation Density CASING RECORD (Report all strings set in well) 23. CASING SIZE WEIGHT LB./FT HOLE SIZE CEMENTING RECORD AMOUNT PULLED **DEPTH SET** N/A N/A 13-3/8" N/A 40' None 8-5/8" 32 1995 11" 800 sacks circulated None 7-7/8" 1570 sacks circulated 5-1/2" 17 8869 None 24 LINER RECORD 25 TUBING RECORD TOP BOTTOM SACKS CEMENT | SCREEN DEPTH SET PACKER SET SIZE SIZE 3-1/2" 7528 7528 Perforation record (interval, size, and number) AMOUNT AND KIND MATERIAL USED DEPTH INTERVAL 7570' to 7620', 7676' to 7736', 7826' to 7834', 7858' to 7880', 10,000 gallons of 15% HCl, plus 4600 pounds 7570' to 8399' 7886' to 7904', 7916' to 7936', 7944' to 7964', 7990' to 8042', of rock salt as diverter 8096' to 8116', 8191' to 8201', 8304' to 8319', 8395' to 8399' (2 jspf for total of 598 holes). **PRODUCTION** 28 Well Status (Prod. or Shut-in) Date First Production Production Method (Flowing, gas lift, pumping - Size and type pump) N/A Hours Tested Gas - MCF Water - Bbl. Gas - Oil Ratio Prod'n For Oil - Bbl Date of Test Choke Size Test Period N/A N/A N/A Casing Pressure Calculated 24 Oil - Bbl Gas - MCF Water - Bbl Oil Gravity - API - (Corr.) Flow Tubing Press. Hour Rate 29. Disposition of Gas (Sold, used for fuel, vented, etc.) Test Witnessed By N/A 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

rell Moorerile Eau Mgr.

Printed Name

-				, —		N.I	M. Oil	Cons. D	ivision	OMB NO.	PPROVED 1004-0137
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y_1992)		UNIT	ED STA	TES		81	See other in	MM1088210	2834 DESIGNATION NM 6852	74.0 00.00	1893 Dec.
DE	PART	MENT	r of th	E INTER	IOR	Ar	(Opiers a	lide) **	6. IF INDIAN, ALLOTTES	OR TRIBE NAME	7,
R	IREAL	OF LA	ND MANA	GEMENT							<
WELL CO	MPLE	TION C	R RECO	MPLETION	REPO	RT AND	LOG*				<u> </u>
		OIL [	GAS	DRY	X	Other	Class	I Waste	7. UNIT AGREEMENT NA	ME	Ochtor, Da
TYPE OF WELL	_	MELL [	WELL				Dispo	sal Well	8. FARM OR LEASE NAI	ME. WELL NO.	ARICO .
TYPE OF COM	SELLON:	سي ر		DIFF-	х	Other	Reent	try	WDW-2	\.	t. 15/2
NEW WELL		SEEPEN!	PLUG C. YBACK	GENVR	ت				9. API WELL NO.	<del></del>	<del>~~~</del> ,
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	Same			WDI	w-2		Apri	.1 27, 199	9 Eddy	New !	Mexico
DATE SPUDDI		16. DATE	T.D. REACHED	17. DATE CO	AP (Ready to	o prod.)	1	l .	F, RKB, RT, GR, ETC.)*		19. ELEV. CASINGHEAD
7-18-73		8-2	7-73	6-8					; 3623 RKB	oous	3609 GL CABLE TOOLS
	EPTH, MD	& TVD	21. PLUG, BAC	K T.D., MD & TVI	D 22.	IF MULTIPLI HOW MAN		23. INTERVALS DRILLED BY	All		
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PRODUCING				тор, воттом	NAME (MD	AND TVD)*			Yes		
L. Wolfo TYPEELECTRE Dual Ind	AND OTHE	R LOGS R	UN Fract	Compens	der an ated	Neutro	liper on. Fo	Logs, ormation [ (Report all strings			No
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CASING SIZEA		AAEI	N/A	40		N	/A	Surfac			None
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						<del> </del>		3-1/2"	7320		
		1	(Interval, size	and number)		1 32		ACID.	SHOT, FRACTURE, CEM	ENT SQUEEZE	E, ETC. MATERIAL USED
7570'-7	10N KECC 620'	7676			-7834'	7.5	<b>DEPTH</b> 16	o 8399'			15% HCl. plus
7858'-7	880'.	7886	'-7904'	, 7916'-	-7936 <b>'</b>	' <del> </del>	) / O L	0 0399	4600 pou	nds of	rock salt as
79111-7	964'	7990	'-8042 <b>'</b>	, 8096'-	-8116'	·			diverter		
8191'-8	201',	8304	'-8319'	, 8395'-	-8399	'					
			of 598			Jawina an	PRODUCT	ION ng-size and type of p	oump)	WELL STA	ATUS (Producing or
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N/	Α		URS TESTED	CHO!	IN , KE SIZE	/ A	N. FOR	OIL-BBL.	GAS-MCF.	WATER-6	BL GAS-OIL RATIO
DATE OF TEST		1	N/A	N/		TEST	PER <b>NOC</b>	PEDTEN EN	R RECORD		
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FLOW, TUBING	PRESS			CALCULAT					1005-		
N/A			N/A	g.)				- <del>38.</del> 29	1999	TEST WI	TNESSED BY
34. DISPOSITIO	ON OF (So	o, usea ror	ILER, VERNEU, EN	<del>,</del>		ADIO	dop	CARLO			
N/A 35. LIST OF AT	TACHMEN	TS			- (	uniu.	1 '	CARY GO	OHLEY		
Dev	iatio	n Rep	ort	attached info	rmation i	s comple	te and co	ned as determi	ned from all available	records.	
36 hereb	certify to	מו פונו זבו. מי מ	111	_				v. Mar.		DAT	E 7/19/99
SIGNED	1 )	ull	1 VULU	V		TITL	<u>د لـ ال</u>	V 1741			

SIGNED



Pattersan Drilling Company

Company

Company

Midland Texas 79701

Fig. 1999 JUL 21

Midland Texas 79701

Fig. 1999 JUL 21

MGMT.

RECEIVED

JUN 0 4 1999

June 2, 1999

SUBSURFACE TECHNOLOGY, INC.

**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

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 2<sup>nd</sup> day of June, 1999 by Rebecca A. Edwards.

MY COMMISSION EXPIRES:

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

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

Environmental Mgr. for Water and Waste

Encl.

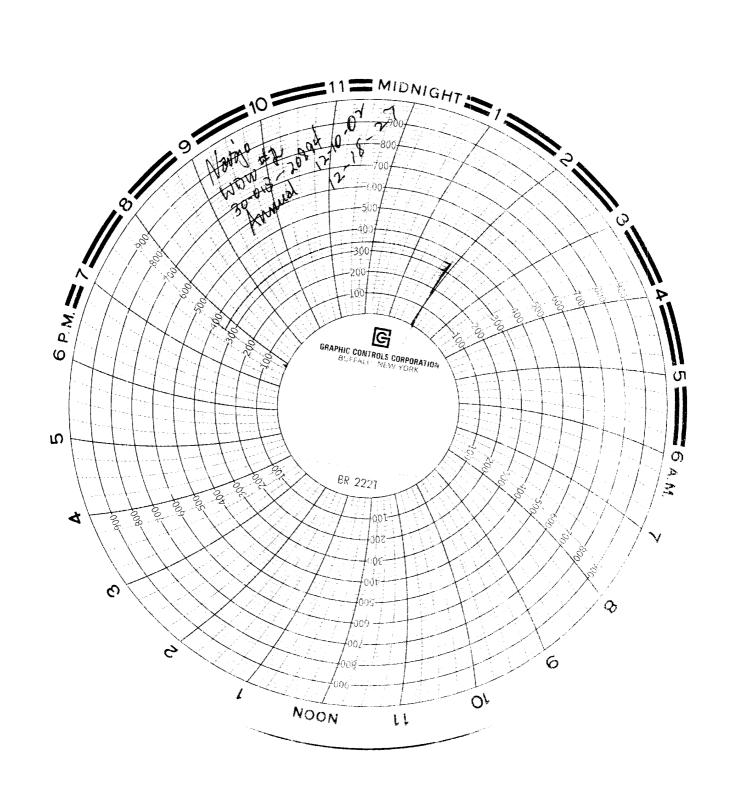
May M. 21 P M. 23

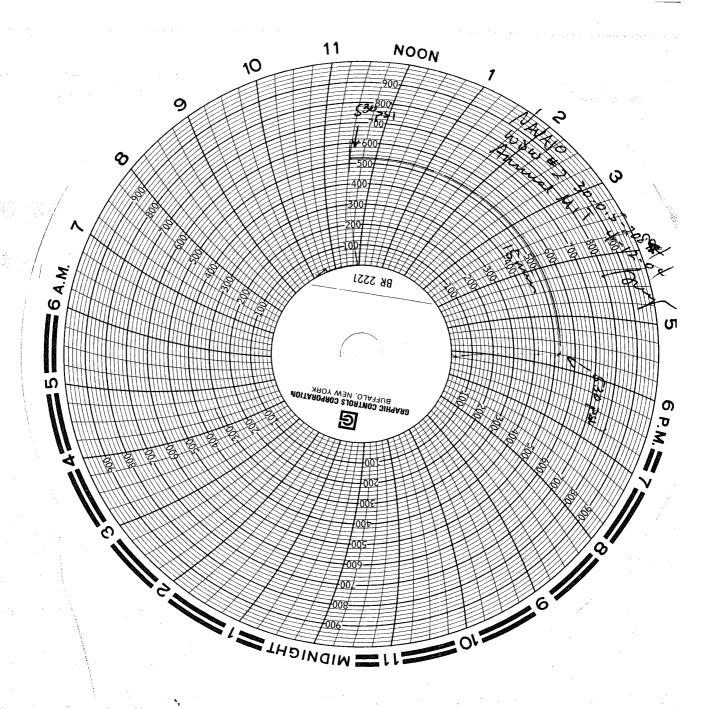
FAX

(505) 746-6410 ACCTG

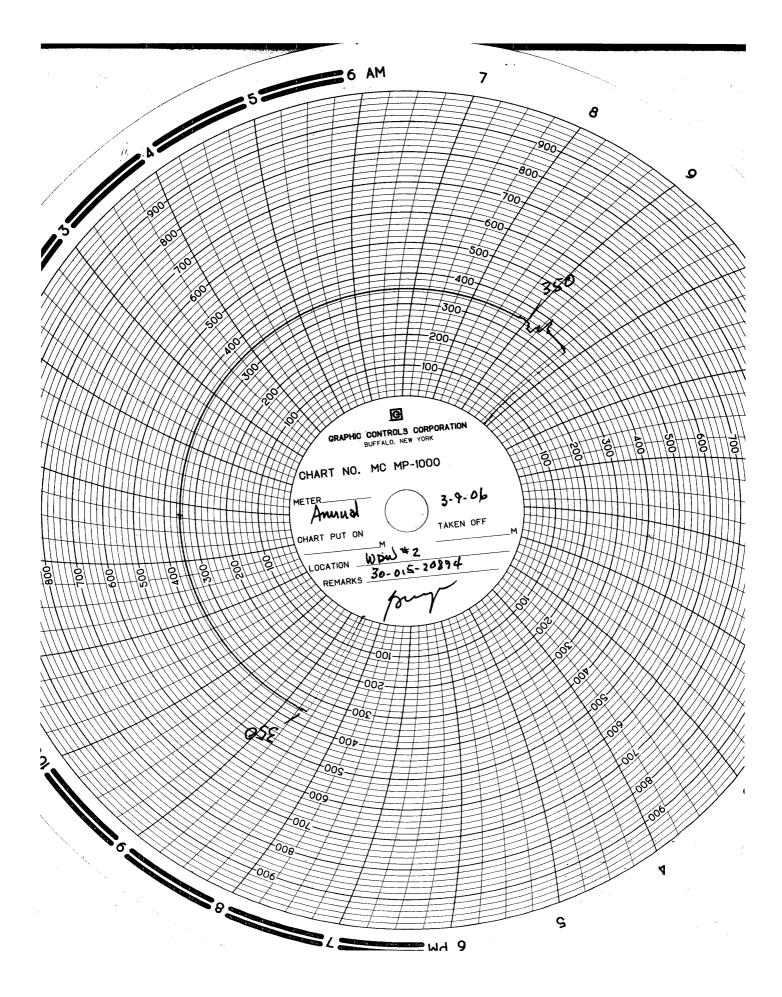
(505) 746-6155 EXEC (505) 748-9077 ENGR

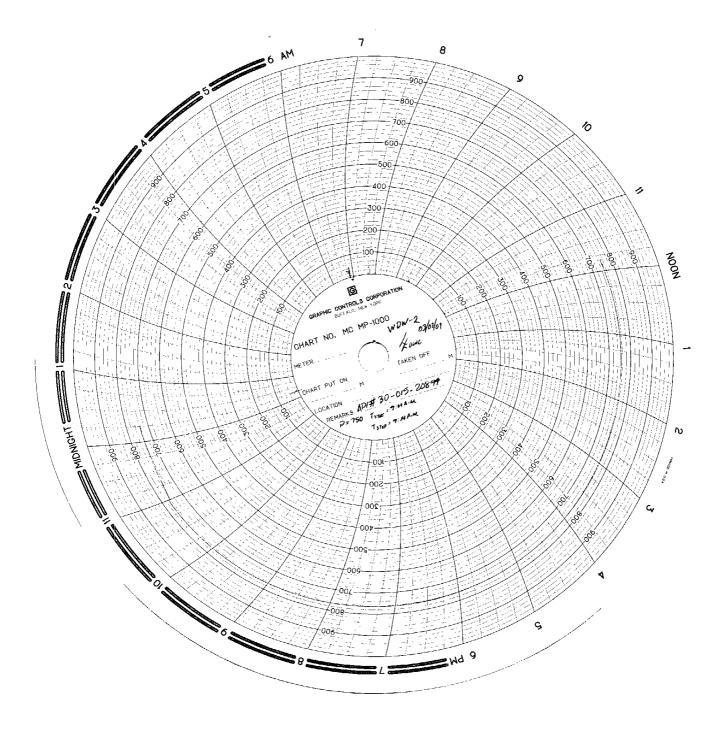
(505) 746-4438 P / L

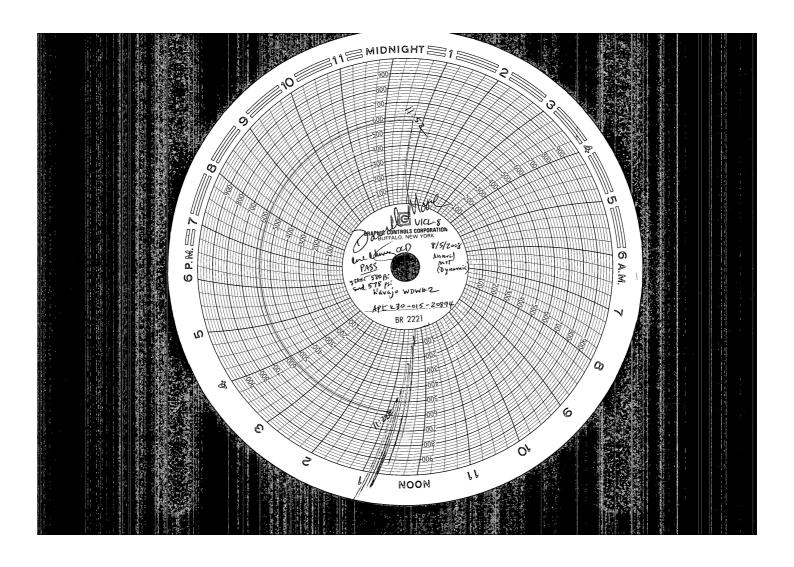


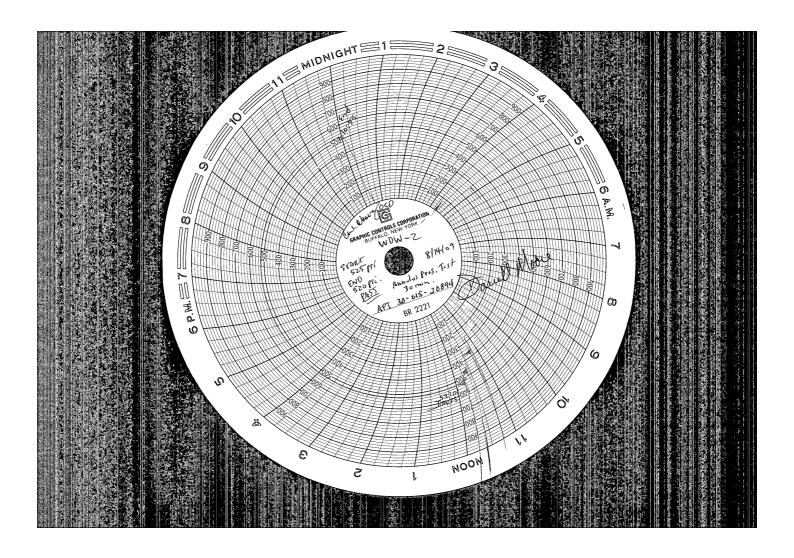


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#### Chavez, Carl J, EMNRD

From:

Chavez, Carl J, EMNRD

Sent:

Thursday, August 12, 2010 1:55 PM 'Moore, Darrell'; Dade, Randy, EMNRD

To: 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: <a href="http://www.emnrd.state.nm.us/ocd/">http://www.emnrd.state.nm.us/ocd/</a> 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

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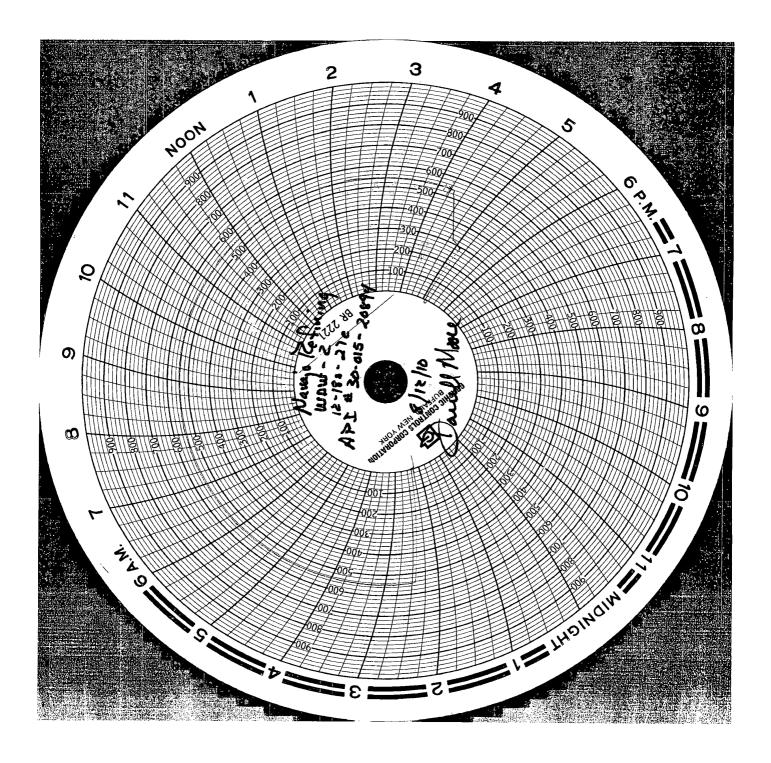


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New Mexico Energy, Minerals & Natural Resources Dept. Oil Conservation Division, Environmental Bureau 1220 South St. Francis Dr., Santa Fe, New Mexico 87505

Office: (505) 476-3490 Fax: (505) 476-3462

E-mail: <u>CarlJ.Chavez@state.nm.us</u>

Website: <a href="http://www.emnrd.state.nm.us/ocd/">http://www.emnrd.state.nm.us/ocd/</a> 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

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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

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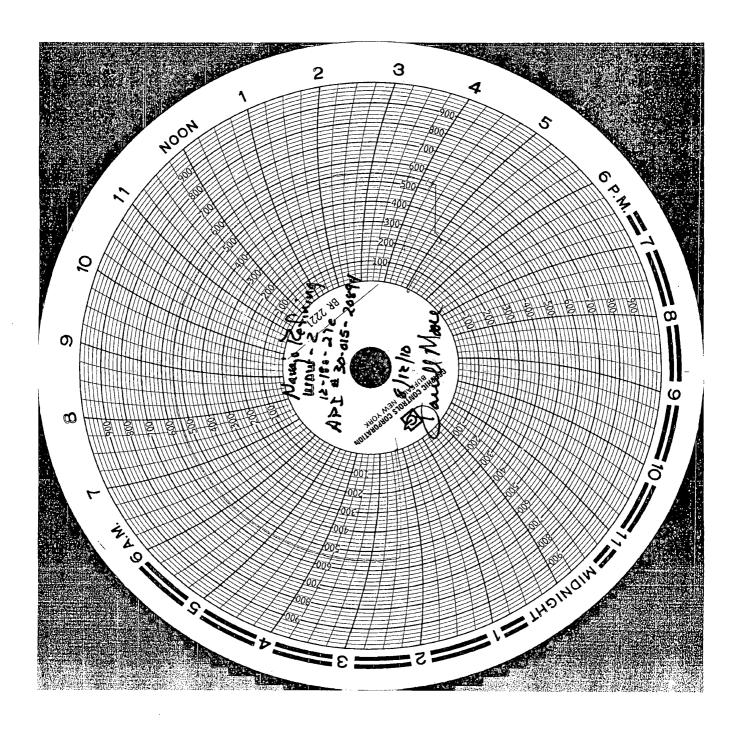


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Submit I Copy To Appropriate District Office	State of New Mex		Form C-103			
<u>District 1</u> – (575) 393-6161 1625 N French Dr., Hobbs, NM 88240	Energy, Minerals and Natur	ai Resources	Revised August 1, 2011 WELL API NO.			
<u>District II</u> - (575) 748-1283	OIL CONSERVATION	30-015-20894				
811 S First St , Artesia, NM 88210 <u>District III</u> – (505) 334-6178	1220 South St. Fran	5. Indicate Type of Lease				
1000 Rio Brazos Rd, Aztec, NM 87410	Santa Fe, NM 87		STATE FEE			
<u>District IV</u> – (505) 476-3460 1220 S St Francis Dr , Santa Fe, NM	Sunta 1 c, 14141 67	303	6. State Oil & Gas Lease No. 6852			
SUNDRY NOTICES A (DO NOT USE THIS FORM FOR PROPOSALS TO DIFFERENT RESERVOIR USE "APPLICATION"	7. Lease Name or Unit Agreement Name Chukka WDW-2					
PROPOSALS)	Well Other Injection We		8. Well Number WDW-2			
2. Name of Operator	Total Injection We		9. OGRID Number			
Navajo Refining Company						
3. Address of Operator Post Office Box 159, Artesia, New Mex	rico 88211		10. Pool name or Wildcat Navajo Permo- Penn 96918			
4. Well Location			1 Chi 30318			
Unit Letter E : 1980	feet from the North	line a	nd <u>660</u> feet from the <u>West</u> line			
Section 12	Township 18S	Range 27E	NMPM County <b>Eddy</b>			
	Elevation (Show whether DR,					
360	07' GL, 3623' RKB					
12. Check Appro	opriate Box to Indicate Na	ature of Notice,	Report or Other Data			
NOTICE OF INTEN	ITION TO:	SUB	SEQUENT REPORT OF:			
	JG AND ABANDON □	REMEDIAL WOR				
	ANGE PLANS	COMMENCE DR				
	LTIPLE COMPL	CASING/CEMEN	T JOB			
DOWNHOLE COMMINGLE	,					
OTHER: PERFORM PRESSURE FALLO PRESSURE TEST  ☑	OFF TEST, ANNULUS	OTHER:				
PRESSURE TEST    □  13. Describe proposed or completed	operations. (Clearly state all p SEE RULE 19.15.7.14 NMAC	pertinent details, an	d give pertinent dates, including estimated date mpletions: Attach wellbore diagram of			
PRESSURE TEST  13. Describe proposed or completed of starting any proposed work). proposed completion or recompleted	operations. (Clearly state all p SEE RULE 19.15.7.14 NMAC etion.	pertinent details, an C. For Multiple Co	d give pertinent dates, including estimated date mpletions: Attach wellbore diagram of			
PRESSURE TEST  13. Describe proposed or completed of starting any proposed work). proposed completion or recompleted of the proposed completion or recompleted proposed completion or recompleted.	operations. (Clearly state all p SEE RULE 19.15.7.14 NMAC etion.	pertinent details, an C. For Multiple Co   nitial pressure of 60	d give pertinent dates, including estimated date mpletions: Attach wellbore diagram of 00 psig and run the test for 30 minutes. Install			
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I hereby certify that the information above is true and	complete to the best of my knowledge and belief.	
SIGNATURE Timble Jones	_ TITLE Project Engineer	DATE 10/3/2011
Type or print name Timothy Johns For State Use Only	E-mail address: Jones @ Subsurfacegroup.co	
APPROVED BY:	TITLE	DATE
Contamons of Approval (17 any)		

Submit 1 Copy To Appropriate District Office	State of New Me		D.	Form C-103		
<u>District I</u> – (575) 393-6161 1625 N. French Dr., Hobbs, NM 88240	Energy, Minerals and Natu	ral Resources	Revised August 1, 2011 WELL API NO.			
<u>District II</u> – (575) 748-1283 811 S. First St., Artesia, NM 88210	OIL CONSERVATION	DIVISION	30-015-20894			
<u>District III</u> – (505) 334-6178	1220 South St. Fran	cis Dr.	5. Indicate Type of Lease STATE   FEE			
1000 Rio Brazos Rd., Aztec, NM 87410 District IV – (505) 476-3460	Santa Fe, NM 87	505	6. State Oil & Gas Lease			
1220 S. St. Francis Dr., Santa Fe, NM						
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2. Name of Operator	Gas Well Galler Injection W		9. OGRID Number			
Navajo Refining Company						
3. Address of Operator			10. Pool name or Wildcat	t: Navajo Permo-		
Post Office Box 159, Artesia, No	ew Mexico 88211		Penn 96918			
4. Well Location				,		
Unit Letter <u>E</u> :	feet from the North			ne West line		
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Article Committee of th	3607' GL, 3623' RKB	KKB, KI, GR, etc.	) 22			
Exercise the second second second second second second second second second second second second second second	1000 C 10					
12. Check	Appropriate Box to Indicate N	ature of Notice.	Report or Other Data			
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I hereby certify that the information above is true and complete to the best of my knowledge and belief.
SIGNATURE Timbly Jones TITLE Project Engineer DATE 10/3/2011
Type or print name Timothy Jones E-mail address: Hones esubsurfacegroup.com PHONE: 713-580-4640
APPROVED BY: Conditions of Approval (if any):  See E-mil Conditions dated 10/19/2011 Abschool to WOW-1.

#### Chavez, Carl J, EMNRD

From:

Chavez, Carl J, EMNRD

Sent: Wednesday, October 19, 2011 4:06 PM

To: 'Moore, Darrell'

Sanchez, Daniel J., EMNRD; VonGonten, Glenn, EMNRD; Dade, Randy, EMNRD Cc:

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)





Office Office	State of New M	exico	Form C-103			
District I - (575) 393-6161	Energy, Minerals and Nat	ural Resources	Revised August 1, 201			
1625 N. French Dr., Hobbs, NM 88240 District II – (575) 748-1283			WELL API NO.			
811 S. First St., Artesia, NM 88210	OIL CONSERVATION	N DIVISION	30-015-20894			
<u>District III</u> – (505) 334-6178 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fra	ncis Dr.	5. Indicate Type of Lease			
<u>District IV</u> – (505) 476-3460	Santa Fe, NM 8		STATE FEE  6. State Oil & Gas Lease No.			
1220 S. St. Francis Dr., Santa Fe, NM 87505			o. State On & Gas Lease No.			
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	as Well Other (Class 1 NH I	niection Well)	8. Well Number WDW-2			
2. Name of Operator		njeotion wenj	9. OGRID Number			
Navajo Refining Company L.L.C.			3. OGIAD IVamoer			
3. Address of Operator			10. Pool name or Wildcat			
501 East Main Street, Artesia, NM			Lwr Wolfcamp-Cisco-Canyon Inj. Zone			
4. Well Location						
Unit Letter: 1980 feet from	the North line and 660 feet from t	he 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 fee	et				
12. Check Ap	ppropriate Box to Indicate N	ature of Notice,	Report or Other Data			
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proposed completion or recon	apletion.	. Tormanipio Con	is in proceedings of the interest of the inter			
Navajo proposes to add perforations in	the existing injection interval at 7	7800 feet - 7830 fee	et, 8050 feet – 8290 feet. These perforations			
would be added in the existing, approv	ed, injection interval in Chukka V	VDW-2.	•			
NOTE: Work is proposed to be perform	ned in July 2012					
13. Well to proposed to be perform	led in July 2013.					
Spud Date:	Rig Release Dat	te:				
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I hereby certify that the information about	ove is true and complete to the bes	st of my knowledge	and belief.			
1 00						
CICNATURE	A Kom					
SIGNATURE / Small of	TITLE Projec	t Engineer	DATE 6-13-2013			
Type or print name Timothy Jones	T7 21 - 3.4.	H 0 1 2				
PHONE: 713-880-4640	E-mail address:	tjones@subsurfac	pegroup.com			
For State Use Only	_					
APPROVED BY: Curl	TITLE ENVI	commended &	Engineer DATE 6/18/2013			
Conditions of Approval (if any):			110			

Submit 1 Copy To Appropriate District Office	State of New M		1	Form C-103
<u>District I</u> – (575) 393-6161 1625 N. French Dr., Hobbs, NM 88240	Energy, Minerals and Nat	tural Resources	WELL API NO.	Revised August 1, 2011
<u>District II</u> – (575) 748-1283	OH CONGERNATION	I DIVITATION	30-015-20894	
811 S. First St., Artesia, NM 88210 District III – (505) 334-6178	OIL CONSERVATION		5. Indicate Type of	of Lease
1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fra		STATE	FEE
<u>District IV</u> – (505) 476-3460 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 8	7505	6. State Oil & Gas	s Lease No.
	ES AND REPORTS ON WELL ALS TO DRILL OR TO DEEPEN OR PI ATION FOR PERMIT" (FORM C-101) F	UG BACK TO A	7. Lease Name or BLM	Unit Agreement Name
1. Type of Well: Oil Well Ga	as Well Other (Class 1 NH I	Injection Well)	8. Well Number V	VDW-2
2. Name of Operator Navajo Refining Company L.L.C.			9. OGRID Numbe	er
3. Address of Operator			10. Pool name or	Wildoot
501 East Main Street, Artesia, NM				sco-Canyon Inj. Zone
4. Well Location				544 Gaily 611 Hg. 22010
Unit Letter: 1980 feet from t	he North line and 660 feet from	the West line		Politican Follows
Section 12	Township 18 S	Range 27 1	E NMPM	County Eddy
	11. Elevation (Show whether DR	, RKB, RT, GR, etc		County Eduy
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12. Check Ap	propriate Box to Indicate N	lature of Notice.	Report or Other I	Data
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A caliper survey will be conducted on t	he 3-1/2-inch injection tubing. T	he caliner survey is	s scheduled to be newf	ormed on Irana 10, 2012
Navajo will conduct an acid stimulation. The stimulation fluid will consist of 20, acid will be injected into the well using	244 gailous of 13% fict acid into	VDW-2 to increase ected into the perfo	injectivity into the per rated interval of 7,270	mitted injection zone. to 8,894 feet RKB. The
	The state of the s			
NOTE: Work is expected to be performed	ed in June and July 2013.			
Court Date				1
Spud Date:	Rig Release Dat	e:		
I hereby certify that the information abo	ve is true and complete to the bes	st of my knowledge	and belief.	Control of the Contro
( 1()				
SIGNATURE Smalls for	TITLE Projec	t Engineer	DATI	E6-13-2013
Type or print nameTimothy Jones	E-mail addres	g tionas@ark	surfacegroup.com	
PHONE: 713-880-4640 For State Use Only	D-man aggres	yones(asub)	surracegroup.com	
APPROVED BY: Conditions of Approval (if any):	TITLE ENVI	connectal En	Junear DATE	6/18/2013



## NAVAJO REFINING COMPANY Map ID No. 35 Artificial Penetration Review

STATUS New Cras LOCATION Sec. 14 -T18S-R27E MUD FILLED BOREHOLE NA TOP OF INJECTION ZONE NA API NO. 30-015- 4012-7
osed 10,500'
<i>o</i> sing
133/8"@ 400' w 42.5x
∠ 95/8" @ E500' ω  850 sx
/2"@10,500' ω 2350 sx

District I 1625 N French Dr., Hobbs, NM 88240 Phone (575) 393-6161 Fax (575) 393-0720 Phone (5/5) 393-6161 Fax (5/5) 393-0/20
<u>Obstract II</u>
811 S First St., Artesia, NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
<u>District III</u>
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170

State of New Mexico

**Energy Minerals and Natural Resources** 

Oil Conservation Division

Form C-101 Revised December 16, 2011 FEB **15** 2012

1220 South St. Francis Dr.

District IV 1220 S St. Francis Dr., Santa Fe, NM 87505 Phone (505) 476-3460 Fax (505) 476-3462						NMOC	CD ARTESIA			
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ouble R	am		5000#		500	0#				
				1				15		
dge and be	lief		•	1	OIL	CONSERVATI	ON DIV	ISION		
I further certify that the drilling pit will be constructed according to NMOCD guidelines □, a general permit □, or an (attached) alternative OCD-approved plan □						Approved By.				
Signature.						L' Shap	ard			
Cy Cow	rafi			Title	(9	rodaist				
Title Land Regulatory Agent						Approved Date 4/18/2012 . Expiration Date 4/18/2014				
	<u>-</u>	<del></del>		<u>`</u>		-				
ss cy@yat	tespetroleum	com		,	//′	7		77		
	Section 14  South esia, 1  Type  Type  Ouble R  fy that the idge and be tify that the delines I we delines I	PLICATION FO  es Petroleum South Fourth esia, New Mex  rty Code 35452  Section 14  Township 14  RS  Hole Size  17.5  12.25  8.75  Type  ouble Ram  Type  ouble Ram  Cy Cowan	PLICATION FOR PERMIT  Operator Name and east Petroleum Corporation South Fourth Street esia, New Mexico 88210  orty Code 35452  Section Township Range 14 18S 27E  Section I Township Range 14 18S 27E  New Mexico 88210  Township Range 15 Proposed Depth 10,500 and water Distant 19  Hole Size Casing Size 17.5 13.375 12.25 9.625 8.75 5.5  Casing Ouble Ram  Prype We ouble Ram	PLICATION FOR PERMIT TO DRI Operator Name and Address es Petroleum Corporation South Fourth Street esia, New Mexico 88210  Township Range Lot Idn 14 18S 27E A  Section Township Range Lot Idn 14 18S 27E A  Wildca  Addit  KType G  Sultiple Signature Casing Size Casing Wildca  Hole Size Casing Size Casing Wildca  17.5 13.375 487 12.25 9.625 367 8.75 5.5 15.5  Casing/Cement  Proposed E  Type Working Pressure Ouble Ram 5000#  Type Working Pressure Ouble Ram 5000#  Type Working Pressure Ouble Ram 5000#	PLICATION FOR PERMIT TO DRILL, RE-EN 'Operator Name and Address es Petroleum Corporation South Fourth Street esia, New Mexico 88210  Property Name and Address esia, New Mexico 88210  Property Name Violet BIV State Cc    Section Township Range Lot Idn Feet from 14 188 27E A 660  Pool Infor    Wildcat Chester    Additional Well    Range I	PLICATION FOR PERMIT TO DRILL, RE-ENTER, DEE  Operator Name and Address es Petroleum Corporation South Fourth Street esia, New Mexico 88210  rivy Code 33452    Violet BIV State Com   Township   Range   Lot Idn   Feet from   North	PLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBA Operator Name and Address as Petroleum Corporation South Fourth Street agia, New Mexico 88210  Try Code 35452  Try Cod	PLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR  Poperator Name and Address  South Fourth Street  Besta, New Mexico 88210  To Crober Street  Str		

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210

State of New Mexico RECEIVED Form C-102
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION FEB 1 5 Submit to Appropriate District Office
State Lease - 4 Copies

<u>District III</u> 1000 Rio Brazos R	d., Aztec, Ni	M 87410			1	220 South	St.	Francis Dr.	OMA	CD AF	RTESIA	Sta F	te Lease - 4 Copies ee Lease - 3 Copies
District IV	,,					Santa Fe	, NI	M 87505 🗀				J .	oo nouse 's copies
1220 S. St. Francis	Dr., Santa I											☐ AM	IENDED REPORT
			WELL				<u>CR</u>	EAGE DEDI	CATI				
33-015. 40/87 97825 WILD CAT									<sup>3</sup> Pool Na	h65tb	72_		
<sup>4</sup> Property	Code					5 Prope		1			Well Number		
35452					VIO			ATE COM					1
<b>70GRID</b> 025575	No.			YATI	ES PI		UM	I CORPORA	TIOI	1			Selevation 3540
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			11	Botto	m Ho	ole Locatio	n If	Different Fro	m Su	rface			
UL or lot no.	Section	Township	Range	Lot	ldn	Feet from the		North/South line	Feet fr	om the	East/West l	ine	County
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320 E2 ·		ĺ											
No allowable	will be ass	signed to	this con	pletion	until a	all interests h	ave l	been consolidate	d or a n	on-standa	ard unit ha	s been	approved by the
division. 16													
10								o o					RTIFICATION ined herein is true and complete
								9					d that this organization either
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								1 AT NO 75	202		-	-	interest, or to a voluntary ng order heretofore entered by
						7.7		LAT N32.752 LON W104.24	1	the division.			02/14/12
				1			l			Signature	<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	0	Date
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									-				best of my belief.
				- [			1			!	RY 6, 2006		
										Date of Sur	Vex R. R.E	DA	
	-									A Company	R. R. E. Bu Sear of Pro	Log	urveyor.
				Ì			}			DANR	REDDYNA	PERP	8/#5412



NAVAJO REFINING COMPANY Map ID No. ⊰⊘ Artificial Penetration Review

OPERATOR Yates Petroleum Co.	STATUS Cancelled App
LEASE Violet BIV State Com	LOCATION Sec. A -T18S-R27E
WELL NUMBER	MUD FILLED BOREHOLE NA
DRILLED NA	TOP OF INJECTION ZONE NA
PLUGGED NA	API NO. <u>30-015-</u> 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.

FEB 13 2009



Submit to appropriate District Office

☐ AMENDED REPORT

1220 S St Franc	TION FO	R PI	ERMIT TO	D DRII	LL, R		a Fe, N <b>TER,</b>						WENDED KEI OK	
PLUGBACK, OR ADD A ZONE  Operator Name and Address										<sup>2</sup> OGRID Number 025575				
Yates Petroleum Corporation 105 S 4 <sup>th</sup> Street Artesia, NM 88210							30-05-36939					139		
<sup>3</sup> Property	Code 1452 3549	~~ ~~				<sup>5</sup> Property iolet BIV S		1			-	<sup>6</sup> Well	i No	
7		9	Proposed Pool 1 Chester	•						10 Prop	osed Pool	2		
Surface Lo		wnship	Range	Lot Idn Feet		rom the	e North/South line		Feet from the	East/W	est line	County		
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8 Proposed Bo UL or lot no		Location with the same with th	on If Differer Range	1	Surface t Idn		rom the	North	/South lin	Feet from the	East/W	est line	County	
Additional	Well Info	rmati	on	_1		l	ŀ							
11 Work Ty N	pe Code		<sup>12</sup> Well Type C G \	ode		<sup>13</sup> Cab	le/Rotary		1	<sup>4</sup> Lease Type Code S			15 Ground Level Elevation 3540'	
<sup>16</sup> Mult N	aple		<sup>17</sup> Proposed De 10,500'	pth			rmation nester	N		19 Contractor Not Determined		<sup>20</sup> Spud Date ASAP		
<sup>21</sup> Proposed	Casing a	nd Ce	ement Prog	ram							,			
Hole Size			ing Size		ng weig	ht/foot	Setting Depth Sac			Sacks of Co	cks of Cement Estim		Estimated TOC	
17.12		1	3 375		48#		400'		425 sx		0			
12 25			625	36#		2500'		850 sx		0				
8 75	i		5.5	15 5#			10500		2350 sx		0			
<sup>22</sup> Describe the proposed program If this application is to DEEPEN or PLUG BACK, give the data of Describe the blowout prevention program, if any Use additional sheets if necessary							a on the pr	esent productive zo	ne and pr	oposed ne	ew productive zone			
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 bes of my knowledge and belief  Signature  M  M  M  M  M  M  M  M  M  M  M  M  M						OIL CONSERVATION DIVISION  Approved by  Acqui  Rounds								
Printed name Cy Cowan							Title Districe 11 Creologist					3+		
Title	Regulatory	/ Ager	nt				Approv	al Date	13109	i i	piration I	Date 1	11	
Date								ons of A	pproval At	tached			TEREU	
February 6	, 2009		(5)	75) 748-	43/2								(EM.	

District II
1625 N. French Dr., Hobbs, NM 88240
District III
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	r		<sup>2</sup> Pool Cod	e	<sup>3</sup> Pool Name					
30-0	6939		Chester Wil				lildCc	14Ca+ 1		
* Property Code					5 Property	Name			Well Number	
354			Violet BIV State Com 1						1 .	
OGRID No.				Operator Name 9 Rlevation						
025575					Yates Petroleum	Corporation			1	3540°
-			7	,	10 Surface	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Peet from the	East/W	est line	County
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UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/W	est line	County
"Dedicated Acre		or Infill 14 C	     ensolidation	Code 15 O	I rder No.	I		<u> </u>		
No allowable division.	will be as	signed to th	is comple	tion until a	ll interests have	been consolidated	or a non-stand	ard unit ha	s been a	pproved by the
16			<del> </del>			Ō				TIFICATION and herein is true and complete

19 OPERATOR CERTIFICATION
I hereby comp that the information contained horon a true and complete
to the best of my headelige and belief and their that arguments and towns a working entered or uniterated momental street as the load scheding
the proposed bottom hole location or ken a right to drill that well as that
location pursuant to a common with an emeral or working
street, or it is a volution produce greater at a completory pooling
Delete hemofore entered by the drivation

1/17/08
Suggature

Date

Cy Cowan, Regulatory Agent
Princied 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

District I
1625 N. French Dr., Hobbs, NM 28249
District II
1301 W. Grand Avenne, Artesia, NM 8
District III
1000 Rlo Brazes Rd., Aztec, NM 37410

District IV

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

1220 S. St. Francis Dr., Santa Fe, NM 87:	95
	WELL LOCATION AND ACREAGE DEDICATION PI

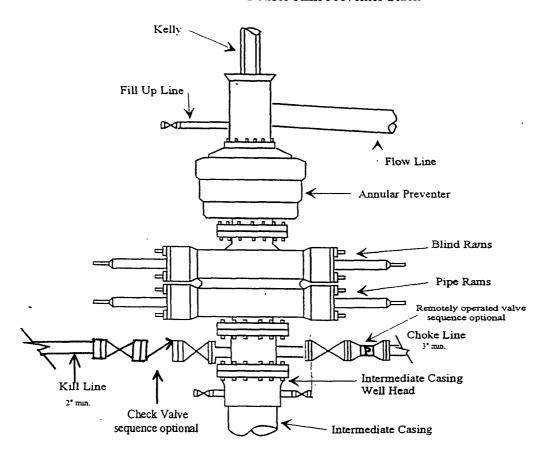
State of New Mexico

			VELL LO	OCATIO	ON AND AC	REAGE DEDI	CATION PL	<u>AT</u>			
<sup>1</sup> API Number				<sup>2</sup> Pool Co	de	<sup>3</sup> Pool Name					
30-015-		j		l							
<sup>4</sup> Property Code				<sup>5</sup> Property	y Name		T	* Well Number			
35452			VIC	DLET BIV S	TATE COM			1			
OGRID No.		<del>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>		<sup>8</sup> Operate	r Name			<sup>9</sup> Elevation			
2557	rS I		Y	ATES P	ETROLEU	M CORPORA	TION		354	10	
0,00		<u> </u>			10 Surface	Location	***************************************			······································	
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12 Dedicated Acre	e li Joint	or Infill 14	Consolidation	Code 15	Order No.	_1	1	J			
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I				ĺ		3	to the best o	ıf my knowledge an	d belief, and that this	organization either	
				ł				lang interest in the	land including the pro	posed bottom hole	
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				- 1			1				
							18SUI	RVEYOR	CERTIFIC	CATION	
		1		1			I hereby	certify that th	e well location s	hown on this	
							plat was	plotted from j	field notes of act	rual surveys	
							made by	me or under	ny supervision, a	and that the	
		}		-			- same is	true and corre	ct to the best of	my belief.	
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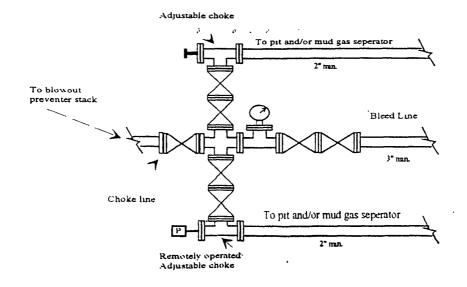


## Yates Petroleum Corporation

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 1
1623 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 Si. Francis Dr., Sunta 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 i	<u>haul-off bins and</u>	<u>propose to imp</u>	<u>lement waste removal for clo</u>	<u>)sure}</u>
	1				

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 hability 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 ordinance

environment. Nor does approval relieve the operator of its responsibility to comply with any other	applicable governmental authority's rules, regulations or ordinances
Operator: Yates Petroleum Corporation	OGRID #:025575
Address: 105 South Fourth Street, Artesia, New Mexico 88210	
Facility or well name: Violet BIV State Com #1 30-015-36939	
API Number: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 req ☐ Above Ground Steel Tanks or ☑ Haul-off Bins	uire prior approval of a permit or notice of intent) 🏻 P&A
3. Signs: Subsection C of 19.15 17 11 NMAC	
Signs: Subsection C of 19.15 17 11 NMAC.  [ ] 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephor.	e numbers
Signed in compliance with 19.15.3.103 NMAC	
Closed-loop Systems Permit Application Attachment Cheeklist: Subsection B of 19.15.  Instructions: Each of the following items must be attached to the application. Please indicated.  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.  Closure Plan (Please complete Box 5) - based upon the appropriate requirements of S  Previously Approved Design (attach copy of design)  API Number:	icute, by a check mark in the box, that the documents are  17.12 NMAC  Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
Previously Approved Operating and Maintenance Plan API Number:	
Disposal Facility Name: CRI Disposal	nks or Haul-off Bins Only: (19.15.17.13.D NMAC)  Ruids and drill cuttings. Use attachment if more than two  Faculity Permit Number: NM-01-0019 R-9166 Pacility Permit Number: NM-1-035
Will any of the proposed closed-loop system operations and associated activities occur on o  Yes (If yes, please provide the information below) No	r in areas that will not be used for future service and operations?
Required for impacted areas which will not be used for future service and operations.    Soil Backfill and Cover Design Specifications based upon the appropriate requirer   Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.1   Site Reclamation Plan - based upon the appropriate requirements of Subsection G of	5.17 13 NMAC

Operator Application Certification:						
I hereby certify that the information submitted with this application is true, accurate	e and complete to the best of my knowledge and belief.					
Name (Print): Cy Coyan /	Title: Regulatory Agent					
Signature: 4800	Date: <u>2/6/09</u>					
e-mail address:cy/ikyjjcspetralcum.com	Telephone: <u>575-748-4372</u>					
7. OCD Approval: Permit Application (including closure plan) Closure Pla	n (only)					
OCD Representative Signature:	Approval Date: 02-24-09					
Title: District 11 Goodagest	OCD Permit Number: <u>0209/36</u>					
8. Closure Report (required within 60 days of closure completion): Subsection les Instructions: Operators are required to obtain an approved closure plan prior to The closure report is required to be submitted to the division within 60 days of the section of the form until an approved closure plan has been obtained and the clo	implementing any closure activities and submitting the closure report.  e completion of the closure activities. Please do not complete this					
o. <u>Closure Report Regarding Waste Removal Closure For Closed-loop Systems of Instructions: Please indentify the facility or facilities for where the liquids, drille two facilities were utilized.</u>	That Utilize Above Ground Steel Tanks or Haul-off Bins Only: ng fluids and drill cuttings were disposed. Use attachment if more than					
Disposal Facility Name:	Disposal Facility Permit Number:					
Disposal Facility Name:	Disposal Facility Permit Number:					
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) \(\sum \) 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.					

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# 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	State of New Mexico	Form C-10
District I	Energy, Minerals and Natural Resources	June 16, 20
1625 N. French Dr., Hobbs, NM 88240		WELL API NO.
District II 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION DIVISION	30-015-36939
District III	1220 South St. Francis Dr.	5. Indicate Type of Lease STATE  FEE
1000 Rio Brazos Rd., Aztec, NM 87410 District IV	Santa Fe, NM 87505	6. State Oil & Gas Lease No.
1220 S. St. Francis Dr., Santa Fe, NM		VA-2131
87505		
(DO NOT USE THIS FORM FOR PROPOSA DIFFERENT RESERVOIR. USE "APPLICA"	ES AND REPORTS ON WELLS LS TO DRILL OR TO DEEPEN OR PLUG BACK TO A TION FOR PERMIT" (FORM C-101) FOR SUCH	7. Lease Name or Unit Agreement Name Violet BIV State Com
PROPOSALS.)  1. Type of Well: Oil Well G	as Well 🛛 Other	8. Well Number
2. Name of Operator		9. OGRID Number
Yates Petroleum Corporation		25575
3. Address of Operator	00010	10. Pool name or Wildcat
105 S. 4 <sup>th</sup> Street, Artesia, New Mexic	o 88210	Chester
4. Well Location		
	and from the North Line and 000 foot from	mathe East line
	eet from the North line and 990 feet from	<del></del>
	ship 18S Range 27E NMPM	County Eddy
	11. Elevation (Show whether DR, RKB, RT, GR, etc. 3540' GR	2.)
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12. Check Ap	propriate Box to Indicate Nature of Notice	, Keport or Other Data
NOTICE OF INT	ENTION TO: SUB	BSEQUENT REPORT OF:
PERFORM REMEDIAL WORK		RK ALTERING CASING
		RILLING OPNS. P AND A
	MULTIPLE COMPL CASING/CEMEN	<del></del>
FULL OIN ALTER CASING [		
OTHER:	OTHER:	Extend APD
13. Describe proposed or complet	ted operations. (Clearly state all pertinent details, a	nd give pertinent dates, including estimated
	t). SEE RULE 1103. For Multiple Completions: A	
or recompletion.		
		one
Yates Petroleum Corporation wishes	s to extend the Application for Permit to Drill fo	r two years until February 23, 2018.
Thank you,		LDECEIVED
		RECEIVED
Current NMOCD rules ar		1AN 1 0 2011
regulations must be met	at APPROVED FOR 1 YEAR	JAN <b>19</b> 2011
time of drilling		NMOCD ARTESIA
and of defining	EXPIRES: 2/23/2012	NINOCD ARTESIA
I hereby certify that the information ab	ove is true and complete to the best of my knowled	ge and belief.
, ,	*	-
Com De 1		
SIGNATURE / / VOUNDLE	TITLE Land Regulatory Technician	DATE <u>January 14, 2011</u>
		أنائك ولالمانية المناوي المناورة والمناورة
Type or print nameMonti Sander	s E-mail address montis@yates	petroleum.com PHONE: (575) 748-
For State Use Only	su tukins are in in 17 in era bins verse	6. W
~ / / / · · · · · · · · · · · · · · · ·	De la Maria de La Carta de La	on to the second of the second
APPROVED BY: Daiold Wi	on TITLE Field Superviso	<u>I</u> DATE <u>  「みり                                   </u>
Conditions of Approval (if any):	7	
	•	•

District 1

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)

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 ordinance.

environment. Nor does approval relieve the operator of its responsibility to comply with any	other applicable governmental authority	's rules, regulations or ordinances.
Operator: Yates Petroleum Corporation	OGRID #: 025575	
Address: 105 South Fourth Street, Artesia, New Mexico 88210	0 diab 11. <u>- 023575</u>	RECEIVED
Facility or well name: Violet BIV State Com#1  30-015-36939		FEB <b>1 5</b> 2012
	209130	- 1 - 1 - 1
U/L or Qtr/Qtr A Section 14 Township 18S Range	27E County: Eddy	NMOCD ARTESIA
Center of Proposed Design: Latitude N32.75293 Longitude W104.2		1983
Surface Owner:  ☐ Federal  ☐ State  ☐ Private  ☐ Tribal Trust or Indian Allotment		
2.		
Subsection H of 19.15.17.11 NMAC	1	
Operation: Drilling a new well Workover or Drilling (Applies to activities while	in require prior approval of a permit of	r notice of intent) $\square$ P&A
☐ Above Ground Steel Tanks or ☐ Haul-off Bins		
Signs: Subsection C of 19.15.17 11 NMAC		
12"x 24", 2" lettering, providing Operator's name, site location, and emergency tel	ephone numbers	
☑ Signed in compliance with 19.15.3.103 NMAC		
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of Instructions: Each of the following items must be attached to the application. Pleas attached.  □ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC □ Operating and Maintenance Plan - based upon the appropriate requirements of 1 □ Closure Plan (Please complete Box 5) - based upon the appropriate requirement □ Previously Approved Design (attach copy of design) API Number: □ Previously Approved Operating and Maintenance Plan API Number:	e indicate, by a check mark in the bo. 9.15.17.12 NMAC s of Subsection C of 19.15.17.9 NMA	
5.		
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Ste Instructions: Please indentify the facility or facilities for the disposal of liquids, dril facilities are required.		
	posal Facility Permit Number: NM	
	posal Facility Permit Number: R-9 sposal Facility Permit Number: NM	
Will any of the proposed closed-loop system operations and associated activities occur  ☐ Yes (If yes, please provide the information below) ☑ No	on or in areas that will not be used for	r future service and operations?
Required for impacted areas which will not be used for future service and operations.  Soil Backfill and Cover Design Specifications based upon the appropriate rec	uiromanta af Cubacatur II af 10 15 1	7 12 NMAC
Re-vegetation Plan - based upon the appropriate requirements of Subsection I of		7.13 INMAC
Site Reclamation Plan - based upon the appropriate requirements of Subsection		
	+	(0209/30)

Form C-144 CLEZ

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: <u>cy@vatcspetrolcum.com</u> Telephone: <u>575-748-4372</u>
7. OCD Approval: Permit Application (including closure plan)
OCD Representative Signature: Acqui Louve Approval Date: 02-24-09
Title: District 1 Godogst OCD Permit Number: 0209/36
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:
Disposal Facility Name: Disposal Facility Permit Number:
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) \( \subseteq \text{No} \)
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
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:

# 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.



# NAVAJO REFINING COMPANY Map ID No. ろう 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 ~ (148)  API NO. 30-015-00870
REMARKS: No casing into Injectio	
	Plug: Surf ω/10 sx Plug: 502-602' ω/60 sx // 133/8" @ 572' ω/700 sx
	Plug: 910'-1010' w 50 sx
	Plug: 1922'-2040' w140 sx > 95/8'@ 1990' w1450s. Cut casing @9601 pulled.
	Plug: 2900'-3400' w1305x
	Plug: 3735'-4119' W/30 SX
	41/2"@ 4500', cut@ 2900', Dulled. PBTD: 4500'
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	eavy mud laden fluid
TD: 72701	

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	et Bureau 42-R358.3. oval expires 12-31-55.

Form 9-331a (Feb. 1951)

# (SUBMIT IN TRIPLICATE)

# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Land Office
Lense No.
Unit

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Form 9-330

LOCATE WELL CORRECTLY

Budget Bureau No. 42-R355.2. Approval expires 12-31-52.

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SERIAL NUMBER LC 068051
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

# LOG OF OIL OR GAS WELL

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# UNITED STATES

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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. It there were any changes made in the casing, state fully, and it 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 sheats. It blugs or bridges were put in to seet for pater, state hind of material used, position, and results of pathing.

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Form C-103 (Revised 3-55)

# NEW MEXICO OIL CONSERVATION COMMISSION MISCELLANEOUS REPORTS ON WEILES

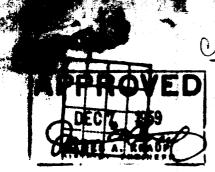
(Submit to appropriate District Office as per Commission Rule 1106)

COMPANY

COMPANY Pan American Petroleum (Ac	orperation, Box 68, Hobbs, New Mexico ddress)
LEASE Buth C. McPherson WELL NO.	UNIT S 11 T 16 R
DATE WORK PERFORMED	POOL Undestructed
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This is a Report of: (Check appropriate	block) Results of Test of Casing Shut-of
Beginning Drilling Operations	Remedial Work
Plugging	
	Change in Company name
Petroleum Corporation" effective Febr	lind Oil and Gas Company" to "Pan American reary 1, 1957"
FILL IN BELOW FOR REMEDIAL WORD Original Well Data: DF Elev. TD PBD	
	Prod. Int. Compl Date
Perf Interval (s)	Oil String Dia Oil String Depth
` ' <del></del>	cing Formation (s)
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RESULTS OF WORKOVER:	BEFORE AFTER
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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)  I hereby certify that the information given
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Title	Position Field Superintendent
Date EB 4 1957	Company Pan American Patroleum Corporation


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N. M. O. C. C. COPY

# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY



MAR 7 1962

# SUNDRY NOTICES AND REPORTS ON WELLSARTESIA, OFFICE

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ı	MOTICE OF INTENTION TO PULL OR ALTER CAMPS.  MOTICE OF INTENTION TO ABANSON WELL	SUBSEQUENT REPORT OF ABANDOMENT	1-1
L	TO MINISH WILL	WELL HISTORY	<del>  -  </del>
			<del>  </del>
	(MIDICATE ABOVE BY CHECK	MARKE MATURE OF REPORT, MOTIOS, OR STREET MATUR	
h	th A was a	MOTICE, OR OTHER DATE:	

Ruth C.	Herbferson
---------	------------

Well No. 1 is located 1980 ft. from S W/4-SE/4, Sec. 11 line and 1960 Mildest

The elevation of the derrick floor above sea level is 3593 ft. RDB

JAN 29 1962

# DETAILS OF WORK

S. GEOLLIS AL SURVEY FTES A TIZM MEKICO

re sander abow alone, weights, and lengths of p 5 points, and all other important proposed we On 11-11-59 P X A eperations were completed. Work done and plugs set as fellows:

Cut and pulled 9 5/8" casing @ 960'.

Set 25 sx cement plug @ 960'; 15 sx cement in bettem of 13 3/8" easing @ 2. 572'; 10 ax ement plug at surface. All intervals filled with heavy 3.

Set P I A marker; restored ground to natural contour.



U. S. GEOLOGICAL SURVE NEW MEXICO

Pan American Petroleum Corporation

Dox 66

Hobbs, Now Mexico

9-331 C
z 1983)

# N. M. O. C. C. SUBMIT IN TRIP CATE - Form approved. Budget Bureau

	1 144 414	SPECTO	Lar.	
Bud	lget I	Bureau	No.	42-R142
_	-1	0 1		

(May 1963)	U DEPARTMEN	ED STATES		reverse sic	on •	Copy to SF  5. LEASE DESIGNATION AND SERIAL NO.
		GICAL SURVI				NM-6850
APPLICATION				N, OR PLUG B	ACK	6. IF INDIAN, ALLOTTEE OR TEIBE NAME
1a. TYPE OF WORK DRI b. TYPE OF WELL	<b>LL</b>	DEEPEN_[	]	PLUG BAC	к 🗆	7. UNIT AGREEMENT NAME
OIL C	ELL OTHER F	Re-Entry	SIN	GLE X MULTIPL ZONE	E	8. FARM OR LEASE NAME Ruth C. McPherson
Bill J. Sm 3. ADDRESS OF OPERATOR			· · · ·		<u> </u>	9. WELL NO.
1504 Stag	gecoach Dr.,	Arlington	n, Te	xas, 76013 ate requirements.*)		10. FIELD AND POOL, OR WILDCAT  Artesia
At proposed prod. zon						11. SEC., T., R., M., OR BLE.  AND SURVEY OR AREA  Section 11, T-18-S  R-27-E
14. DISTANCE IN MILES A 14 miles	east of Arte					12. COUNTY OR PARISH 13. STATE  Eddy New Mexico
15. DISTANCE FROM PROPO LOCATION TO NEAREST PROPERTY OR LEASE L (Also to nearest drig		660•		of acres in lease	TO T	of acres assigned HIS WELLO
18. DISTANCE FROM PROP- TO NEAREST WELL, DI OR APPLIED FOR, ON THE	RILLING, COMPLETED,	none		1800		otary
21. ELEVATIONS (Show who	ether DF, RT, GR, etc.)					22. APPROX. DATE WORK WILL START* September 15, 1970
23.		PROPOSED CASE	NG AND	CEMENTING PROGRA	М	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	оот	SETTING DEPTH		QUANTITY OF CEMENT
17"	13 3/8#   9 5/8#	N/A*		572 <b>'</b> 1990	70	
stub with	casing bowl	and 32.3	# 9	: 1900', tie 5/8" casing, ce as necessa	peri	9 5/8" casing forate indicated at test.
Casing serwas not pr	D DOODOSED DENCEMAN - If	originall; 3" casing	nen or D	llled in 1956 at 960' and	pulle	luctive zone and, proposed new productive
zone. If proposal is to preventer program, is an 24.	drill or deepen direction	ally, give pertinen	t data o	n subsurface locations an	id measure	d and true varice richts. Give blowout
SIGNED DU	Shri	1/6 TI	TI.E			DATS 9.1-70
•	ray or State office use)		-, , , , , ,	MADONAL DATE	•	
APPROVED BY	につく	-	I OPE	NTHE	. ' '	RECEIVED
ADD R (PPR)	AL, IF ANY:	IS RESCINDE	1978			<b>SEP</b> 9 1970
ACTION STATE	KMA NIT THIS APPRE		uctions	On Reverse Side	saka e sa jako.	D. C. C.
<b>1</b>						

# MEXICO OIL CONSERVATION COMMISS WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

		VII (TRUME	s must be itom u	ne outer countaines o			<del></del>			
Dill J. Smith				Ruth C. Mc	Pherson		Well No.			
Unit Letter J	Section 11	Township 18-S		Range 27-E	County	ly				
Actual Footage Local		uth	line and	1980 <sub>fe</sub>	et from the	East	line			
Ground Level Elev: 3580	Producing Form		Poc	Artesia		1	ated Acreage: 40 Acres			
	e acreage dedicat		ubject well b	y colored pencil	or hachure m	arks on the plan				
	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 an	swer is "yes	s;' type of co	nsolidation						
this form i	f necessary.)				ctually baci		Use reverse side of			
							zation, unitization, wed by the Commis-			
	l I					CER'	TIFICATION			
				1 1			that the information con- true and complete to the edge and/kelief.			
				İ						
	+		<del>_</del>		- ·	Position	Strills			
	1 1					Cempany				
	1					Date				
	1									
				1980'		shown on this pl	that the well location at was plotted from field			
				1788	<del></del>	under my supervi	surveys made by me or ision, and that the some rect to the best of my elief.			
		•	986	·			Original Plat			
·	I I I				1 1	Registered Profess and/or Land Survey				
						Certificate No.				
C 330 660	90 1320 1650 198	2310 2640	2000	•	500 0	C-mode No.				

1-8-71 10-26-70 9-28-70 TEMPORARILY ABANDONED CSGA SX. TUBING 13 3/8" at 572' w/700 8x 9 5/8" at 1990' w/450 sx 4 1/2" at 4500' 9-22-70 CONT LOGS EL GR RA IND HC A 1 McPherson, Ruth C. Sec 11, T-18-S, R-27-E 1980' FSL, 1980' FEL of Sec Re-Cmp 4-19-71 SMITH, BILL J. Acid (4070-4100') 3000 gals Swbd blk sul wtr (4070-4100') TD 7270'; PBD 4500'; SI
TD 7270'; PBD 4500'; SI
TD 7270'; PBD 4500'; SI TD 7270'; PBD 4500'; Prep PB to Grayburg Cleaned Out to 4500'
Ran 4 1/2" Casing
Perf (Yeso) 4070-4100' F.R. 9-15-70; Opr's Elev. 3580' GL (Orig. Stanolind Oil & Gas #1 McPherson-Feder:1, P&A 11-7-56, OID 7270') PD 1800' WO (Crayburg) Distribution limited and publication prohibited by subscriben' agreement.

Reproduction rights reserved by Williams & Lee St. suting Scroice, Inc.

PROP DEFTH 1800' (Fulled) TD 7270'; PBD 4500' FORMATION DATUM CLASS STATE NM MH 00870 FORMATION Jamos CO.ORD X > TYPE WU EL 3592 MUTAG

EDDY Artesia NM Sec 11,T18S,R27E SMITH, BILL J. 1 McPherson, Ruth C. Page #2 2-22-71 TD 7270'; PBD 4500'; SI 4-12-71 TD 7270'; PBD 4500'; SI

4-12-71 4-19-71 4-22-71

COMPLETION REPORTED

TD 7270'; PBD 4500'; TEMPORARILY ABANDONED

10-26-70 9-28-70 9-22-70 DATE TEMPORARILY ABANDONED CSGA SX. TUBING 13 3/8" at 572' w/700 sx 9 5/8" at 1990' w/450 sx 4 1/2" at 4500' LOGS EL GR RA IND HC A Re-Cmp 4-19-71 1 McPherson, Ruth C. Sec 11, T-18-S, R-27-B 1980' FSL, 1980' FEL of Sec Acid (4070-4100') 3000 gals Swbd blk sul wtr (4070-4100') TD 7270'; PBD 4500'; SI TD 7270'; PBD 4500'; SI TD 7270'; PBD 4500'; SI PD 1800' WO (Crayburg)
(Orig. Stanolind Oil & Gas #1 McPherson-Feder&1,
P&A 11-7-56, OID 7270')
TD 7270'; PBD 4500'; Prep PB to Grayburg
Cleaned Out to 4500' Ran 4 1/2" Casing Perf (Yeso) 4070-4100' F.R. 9-15-70; Opr's Elev. 3580' GL imited and publication prohibited by subscribent agreement in rights reserved by Williams & Lee St outing Service, Inc.

PROP DEPTH 1800 (Pulled) TD 7270'; PBD 4500' FORMATION DATUM CLASS STATE NM MH 00870 FORMATION Jamo CO.ORD ¥ TYPE WU EL 3592 DATUM

EDDY 4-12-71 SMITH, BILL J. 2-22-71 TD 7270'; PBD 4500'; SI
TD 7270'; PBD 4500'; SI
TD 7270'; PBD 4500'; TEMPORARILY ABANDONED 1 McPherson, Ruth C. Artesia M Sec 11,T18S,R27E C. Page #2

4-19-71

4-22-71

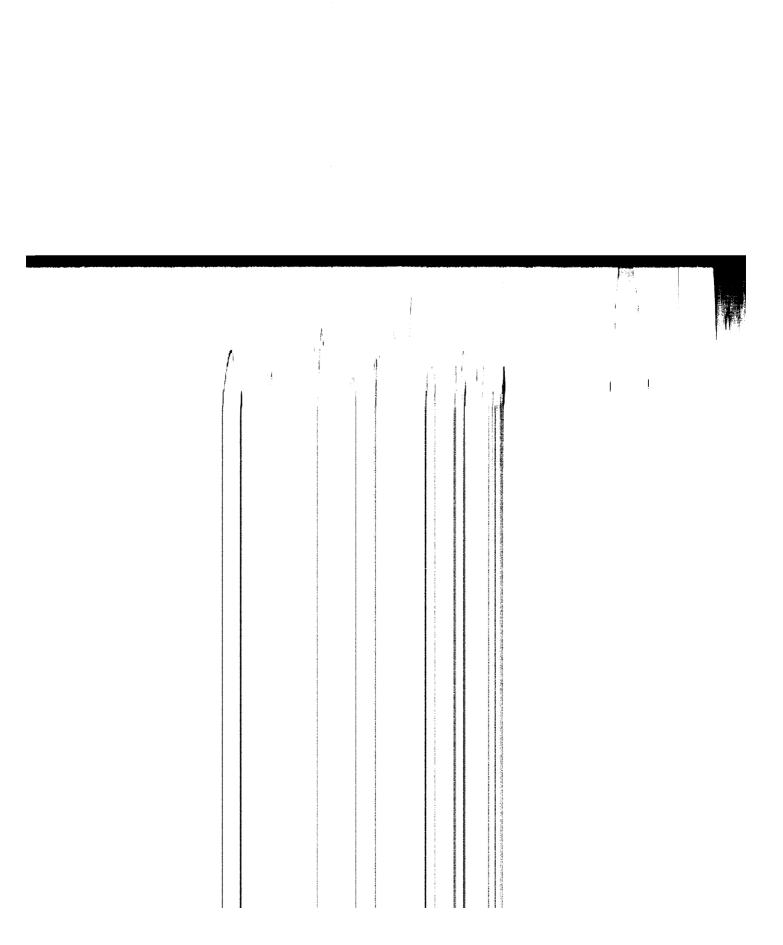
COMPLETION REPORTED

	M TI	o. c. c. (	COPT	copy " si
Form 9 344 (May 1963)	UN D STATI DEPARTMENT OF THE GEOLOGICAL SU	ES INTERIOR	SUBMIT IN TRIPL 'E.	Form approved. Budget Bureau No. 42 R1424.  5. LEASE DESIGNATION AND SERIAL NO.
the second state of	ORY NOTICES AND REF	PORTS ON	o a different reservoir	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
WELL WELL	OTHER DRY-HOA	LE RE	ENTRY	7. UNIT AGREEMENT NAME  8. FARM OR LEASE NAME
	ion Company ECEI		013	SMITH MCPHERSON
BOX 68, HOBBS, N	L M. 88240	الال	13/9/3 MANUEL	9. WELL NO.
4. Too ATION OF WELL (Re See itse space 17 below At surface	port location clearly and in accordance.	ce with any State	reliting mental	10. FIELD AND POOL, OR WILDCAT  WILDCAT  11. SEC., T., R., M., OR BLE, AND
1980 FSL x	1980 EL Sec. 11	(UNITJ, I	MW/4 SE/4)	SURVEY OR ARMA 11-18-27 NMPM
14. PERMIT NO.	15. ELEVATIONS (Short 35)	w whether DF, RT, $O$	R, etc.)	EDDY N.M.
16.	Check Appropriate Box To	Indicate Natur		In .
NO	OTICE OF INTENTION TO:		Paraus	UENT REPORT OF:
TEST WATER SHUT-OFF	-1		WATER SHUT-OFF	REPAIRING WELL
FRACTURE THEAT SHOOL OR ACIDIZE	MULTIPLE COMPLETE ABANDON*		FRACTURE TREATMENT SHOOTING OR ACIDIZING	ALTERING CASING ABANDONMENT®
REPAIR WELL	CHANGE PLANS		(Other)	
(Other)			Completion or Recomp	of multiple completion on Well letion Report and Log form.)
17. presents proposed work. If	COMPLETED OPERATIONS (Clearly state well is directionally drilled, give sub	all pertinent det surface locations	alls, and give pertinent dates, and measured and true vertice	including estimated date of starting any all depths for all markers and zones perti-
Physics	al avandonn	nent a	J well con	icluded 6-6-13.
11/1	and aband		// ·	
Filled	hole up mus	L. (PB		
Spotte	L 30 D4 Cement	plug	4119-3735	(BUN. PERS. 4100-4070
· · · · · · · · · · · · · · · · · · ·	pulled 41/2 cog	' //		
Spatted	30 Sx ument p			+Out J415" Dtub)
No 95/	40 5x "	id in	140-1922' Hole	
Spatter	2.50 ax. Elmint	plug i	010 - 910' 602: 602' (13 Surjace & Li	34°CSA 572 ) ected Po A marker.
Socation	. Shall be ele	aned	: Levelled	
1. I hereby certify that t	the foregoing is true and correct	TITLE AREA	ENGINEER	DATE 6-15-73
This space for Federa				3 2 2 3
APPROVED BYCONDITIONS OF AP	REPTALINE 1	PITLE		DATE
0. 4. USGS-KAP	121973			92 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
1-505 A 1-12RY	BEEKMAN See	Instructions on	Reverse Side	
2. HRCO IIII BLA	( Company			



# 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  REMARKS: Calculated Top of Cement b	STATUS Pluged  LOCATION Sec. 11 -T18S-R27E  MUD FILLED BOREHOLE NA  TOP OF INJECTION ZONE 70701  API NO. 30-015- 20510
	2 113/4"@ 1000' w/ 9705x
	992 perfs: 1049'-1050' cement retainer @ 950' 592 350 5x @ Surf. in 113/4"
77/////PI	lug: 5350' W ZG sx lug: 6211'-6400' W 40 sx 35/8" @ 6348
₱ ₱ Perfs: `	0 6996' W 15 sx 7046'-7388' 7613'-7863' W 25 sx
# Perfsi C	19495' w 5 =x on top 19621'-9929' liner @ 6277'-10,138' w 855 =x



IT IS THEREFORE ORDERED: Que R-4264 2-28-72

(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.

Map ID 40

PLC # 43 4-6-72

# NET 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.

Lerator					Lease						Well No.
AMOCO PRODUCTION COMPANY			ANY	MALCO "A" FEDERAL					3		
'nit Letter	Section		Township		Roma	le .		County			
F		11	18 S	оитн	2	7 EAST	_1		EDDY		
Ctual Footage Lo	cation of	Well:							344		
1650 feet from the NORTH line and					1653		ieet	from the	WEST	T	line
fround Level Elev	. F	roducing Fo			P∞l	Wildcat				()e-j1	nted Accenge:
•	1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.										
2. If more t	han one ind roya	lease is	dedicated	to the wel	l, outline	each and i	ider	ntify the o	ownership t	hereol	(both as to working
dated by Yes If answer this form	No is "no if neces	itization,  o If a '' list the assary.)	owners and	force-pooli  res;' type of  tract desc  ell until al	of consol	which have	ac n c	tually bec	en consolid	ated.	(Use reverse side of ization, unitization, oved by the Commis-
sion.	· · · · · · · · · · · · · · · · · · ·										TIFICATION
	     	1650'			. <del></del>				tained he	erein is	that the information con- true and complete to the fledge and belief.
1653	3' —					1			·		endent ction Company
				· .	1/8	MEERG	<u></u>		SEP	27_	1971
		           				676		SURVEYOR -	shown o notes of under m is bruk know A	OCT.	orrest to the best of my
		: : :							Registered	EMBE	ER 16, 1971
		<b>!</b>	·			 			om d√or Lo	and Surv	n WWest
								<del>pour</del>	Certificati	No.	676
0 330 660	.90 1	320 1680	980 2310 26	i i '	00 180	1000		800 (			

# NL , MEXICO OIL CONSERVATION COMMISS . 4

Outline the acreage de lif more than one lease interest and royalty).  If more than one lease dated by communitizate with this form if necessary. No allowable will be a forced-pooling, or other sion.	All distances must	be from the outer	boundaries of the			-015-20510
F 11  If Footage I ocation of Well:  1650 feet from the last Production of Well:  167 RDB  Outline the acreage do life more than one least interest and royalty).  If more than one lease dated by communitizate this form if necessary.  No allowable will be a forced-pooling, or other sion.	ICTION COMPANY	Lease M	lurcu 2	TETERA	RTESIA, OFFIC	3E # /
F 11  Il Frontage Location of Well:  1650 feet from the ST 'RDB Product  BT 'RDB Product  Outline the acreage de interest and royalty).  If more than one lease dated by communitizate this form if necessary.  No allowable will be a forced-pooling, or other sion.	Township	Range		right y	, <del> </del>	
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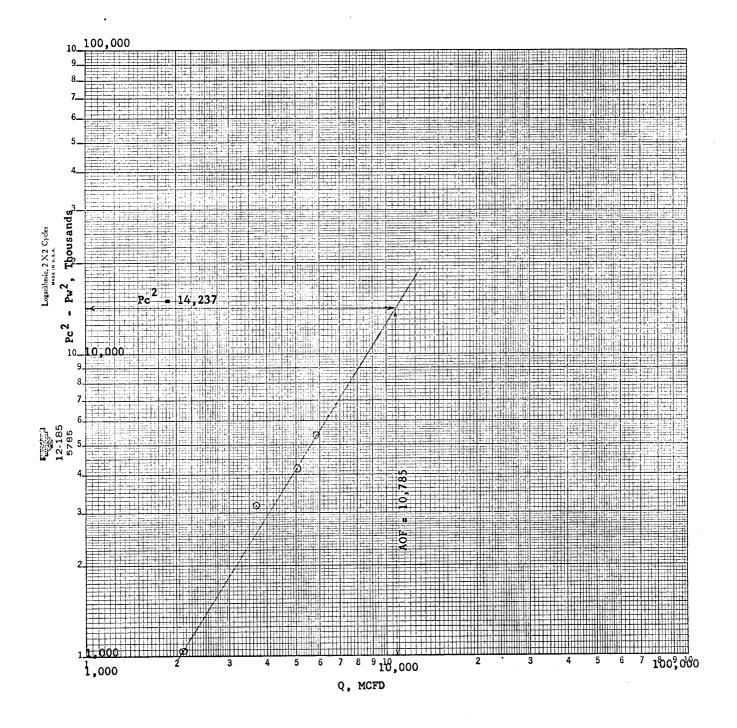
Form approved. Budget Bureau No. 42-R1425.

# UNITED STATES DEPARTMENT OF THE INTERIOR

30-015-20510

	DEFARTMEN	I OF THE INTE	KIOK		5. LEASE DESIGNATION AND SERIAL NO.
	LC-067858				
APPLICATION	L FOR PERMIT	TO DRILL DEE	PEN, OR PLUG B	ACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
1a. TYPE OF WORK	1000120000		. =	7 ( )	
	LL 🛛	_ DEEPEN _	PLUG BAG	CK 🗆	7. UNIT AGREEMENT NAME
b. Type of well		RECEI	ED MULTIP		<u> </u>
WELL WE	CLL OTHER		ZONE ZONE		8. FARM OR LEASE NAME
2. "Alth@co" Pfoduc	ition Company	OCT 8 19	971	:	9. WELL NO.
3. ADDRESS OF OPERATOR BOX 68, HOBBS,	N M 88240				3
		D. C. C		<u> </u>	10. FIELD AND POOL, OR WILDCAT
4. LOCATION OF WELL (Re	•	• /		<b>\</b>	11. SEC., T., R., M., OR BLK.
1650 FNL At proposed prod. zone	, x 1653 FW	IL Sec. 11 ( F	F, SE/4 NW/4		AND SURVEY OR AREA
77					11-18-27 NMPM
14. DISTANCE IN MILES A	ND DIRECTION FROM NEA	REST TOWN OR POST OFF	ICE*	÷	12. COUNTY OR PARISH 13. STATE
15. DISTANCE FROM PROPOS	SED*	16.	NO. OF ACRES IN LEASE	17. NO. 0	OF ACRES ASSIGNED
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(Also to nearest drlg. 18. DISTANCE FROM PROPO	SED LOCATION*	19.	PROPOSED DEPTH	20. ROTA	RY OR CARLE TOOLS
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21. BLEVATIONS (Show whether	ther DF, RT, GR, etc.)		10,000	•	22. APPROX. DATE WORK WILL START*
				9	
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	85/8"	24- 36#	6200'	Fu	u 600 above abo
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zone. If proposal is to d	irill or deepen directions				d and true vertical depths. Give blowout
preventer program, k any 24.	<u> </u>			<u>;</u>	<u>- 유 볼록 강의 당의 복리스士</u>
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# NEW MEXICO OIL CONSERVATION COMMSSION MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL CEIVED

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# REQUEST FOR THE EXTENSION OF AN EXISTING POOL

OR

# THE CREATION OF A NEW POOL

TO: The Oil Conservation Commission		Date	19./K
State of New Mexico			
		40 "0"	<i>d</i> .
Amoco Production Company BOX 68	, HOBBS, N. M. 88240	MALCO S:	teseral
Name of Operator		A Tablic Of 250	
Located 1650 feet from	the NORTH	li	ne and 1653 feet
Well No.	. 1	,00	OTE
rom the WEST line of		18-0	WFE
om me	Section	Township	Range
or that a new pool be created to include the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the following described by the fol	wing described area W/2  Deaw-Pa	SEC.11,7	
	Amoco Produc	tion Company	***************************************
	~ · r	Operator	•
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Name of Producing Formation:		<u>.</u>	
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NMOCC- ART RESTORMENTAN			FEB 1 4 1972

Amoco Production Company -2-

COMMINGLING ORDER PLC-43 (con'd)

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

**GOVERNOR** BRUCE KLAC CHAIRMAN

LAND COMMISSIONER -ALEX J. ARMIJO

MEMBER

STATE GEOLOGIST A. L. PORTER, JR.

SECRETARY - DIRECTOR

87501

April 6, 1972

APR 7 1972

O. C. C. ARTESIA, OFFICE

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FREE EIVED

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 D	S/2 NE/4 Sec. 10-13-27
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 <u>P-4291</u> the following described well (a) (has-kare) been placed in the pool (a) 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

RESTIVED

MAR 20 1973

ARTICLE, OFFICE

New Mexico Oil Conservation Commission P. O. Drawer DD Artesia, New Mexico, 88210

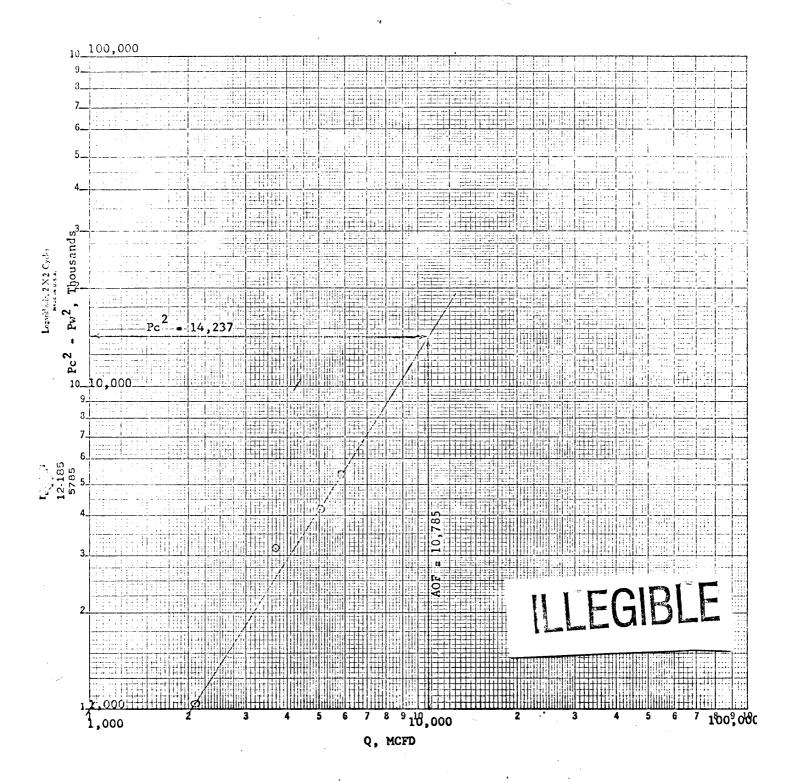
#### Gentlemen:

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



## EW MEXICO OIL CONSERVATION CC SSION MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL RECEIVED

Ty	e Test			T. T. T. T							Test Do	rt e			MAR	20	197	3
	Ŀ	Initio	əl 			Annual			☐ Sp	ecial	12/	22/1	71		171/ 11 -			J
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App	roved By Co	mmission	n 8	Conduc					Calculat	-			T	Checked	Byı			
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# HO. OF COMICS RECEIVED DISTRIBUTION SANTA FE FILE U.S.G.S. LAND OFFICE IRANSPORTER GAS OPERATOR /

## NEW MEXICO OIL CONSERVATION COMM. :ON REQUEST FOR ALLOWABLE

Form C-104 Supersedes Old C-104 and C-110 Effective 1-1-65

AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

L	U.S.G.S.	AUTHORIZATION TO TRAI	ASPORT OIL AND NATURAL G	AS
	LAND OFFICE			
	TRANSPORTER GAS /	. F	RECEIVED	
ı. [	OPERATOR / PRORATION OFFICE			
	Operator AMOCO DRODUCTION	CORADANIV	321 10 22	
	AMOCO PRODUCTION	COMPANT		
	Address	.c 70226	ARTESIA, OFFICE	
	P.O. DRAWER A, LEVELLAND, TEXA	72 13230	Other (Please explain) £4	26 9 -1 - 76
- 1	Reason(s) for filing (Check proper box)	Change in Transporter of:		DUCTION COMPANY
- 1	New Well	Oil Dry Gas		
- 1	Recompletion Change in Ownership	Casinghead Gas Condens	sate To: GAS COMP.	ANY of NEW MEXICO
L	Change in Ownership			
	f change of ownership give name and address of previous owner			
	DESCRIPTION OF WELL AND L	EASE   Well No.   Pool Name, Including Fo	rmation (Kind of Lease	e Lease Nc.
	MALCO "S" FEDERAL	1 Scoggin Dram	- MORROW State, Federa	I OF FEO FEDERAL LC-047858
	Unit Letter <u>F</u> ; 165	O Feet From The NORTH Line	e and 1653 Feet From	The WEST
	Line of Section // Town	18-5 Range	27-E, NMPM, 6	POY County
<b>(1</b> . ]	DESIGNATION OF TRANSPORT	ER OF OIL AND NATURAL GA	Address (Give dacress to witten appro	
1	AMOCO PRODUCTION CO		Box 1183 · Houston, Address (Give address to which appro	TEXAS 7700/ ved copy of this form is to be sent)
Ì	GAS COMPANY OF N		FIRST INTERNATIONAL	DALLAS, TX 752.70
}		Unit Sec. Twp. P.ge.	Is gas actually connected? Wh	ien
	If well produces oil or liquids, give location of tanks.	F 11 18 27	YES	12-27-72
	If this production is commingled with COMPLETION DATA	h that from any other lease or pool,	give commingling order number:  New Well Workover Deepen	Plug Back   Same Resty. Diff. Resty.
	Designate Type of Completio			
	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		<u> </u>	Depth Casing Shoe
		TURING, CASING, AND	CEMENTING RECORD	
	HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
	HOLE SIZE			
V.	TEST DATA AND REQUEST FO	OR ALLOWABLE (Test must be a	fter recovery of total volume of load oileth or be for full 24 hours)	l and must be equal to or exceed top allow-
	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 COMPLIAN	CE		ATION COMMISSION
			APPROVED SEP 14	1976 , 19
		regulations of the Oil Conservation with and that the information given a best of my knowledge and belief.	4//	nossett
	SOOMS IS THE STA COMPLETE TO SE	- <del>-</del>	TITLESUPERVISOR	DISTRICT. IL

054-NM OCC- ART Administrative Assistant 1- DIV 1-1MG (Title) 1-Hondo 9-3-76 (Dute) 1-. Susp . 1-RL  This form is to be filed in compliance with RULE 1104.

If this is a request for sllowable 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 were.

NO. OF CUPIES RECI	.NO. OF CUMIES RECEIVED		
DISTRIBUTIO			
SANTA FÉ	1		
FILE	FILE		
u.\$.G.S.	u.\$.G.S.		
LAND OFFICE			
IRANSPORTER	OIL	1	
THANS! ON EN	GAS	1	
OPERATOR		1	

## 

Form C-104 Supersedes Old C-104 and C-110 Effective 1-1-65

AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

### RECEIVED

OPERATOR 1	RE	CEIAED	
PRORATION OFFICE			
AMOCO PRODUCTION COMPANY	JA	N 28 1977	
Address			
P.O. Drawer A, Levelland	I, Texas 79336	O. C. C.	·
Reason(s) for filing (Check proper box)		Other (Please explain)	ff. 8-1-76
New Well	Change in Transporter of:		
Recompletion	Oil Dry Gas	<u>X</u> From: Gas Compan	y of New Mexico
Shange in Ownership	Casinghead Gas Condens	sate 🔲   To: Amoco Prod	uciton Company
if change of ownership give name and address of previous owner			
DESCRIPTION OF WELL AND I	EASE   Well No.   Pool Name, Including Fo	rmation (Kind of Lease	Lease No.
Malco "S" Federal	1 Scoggin Draw-	A. Complete	LC-067858
Linit Letter / F 16	550 Feet From The North Line	and 1653 Feet From 5	rheWest
		Z-E , NMPM, Edd	
DESIGNATION OF TRANSPORT	ER OF OIL AND NATURAL GAS	S	
Name of Authorized Transporter of Oil	or Condensate 🗶	Address (Give address to which appro-	ved copy of this form is to be sent)
Amoco Production Compa	any - Trucks	Box 1183, Houston, Tex	as 77001
Name of Authorized Transporter of Cas	•	Address (Give address to which appro-	ved copy of this form is to be sent)
Amoco Production Compa	any	P.O. Drawer A, Levellan	
If well produces oil or liquids,	Unit Sec. Twp. P.ge.	Is gas actually connected? Who	
give location of tanks.	F 11 18 27	Yes	12-27-72
of this production is commingled wit	h that from any other lease or pool,	give commingling order number:	
COMPLETION DATA			
Designate Type of Completion	n - (X)   Gas Well	New Well Workover Deepen	Plug Back   Same Resty.   Diff. Resty.
Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
<b></b>			
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
Ferforations			Depth Casing Shoe
	TUBING, CASING, AND	CEMENTING RECORD	
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
			<u> </u>
			<u> </u>
TEST DATA AND REQUEST F	OR ALLOWABLE (Test must be af	ter recovery of total volume of load oil	and must be equal to or exceed top allow-
OIL WELL	date for this de	pth or be for full 24 hours)	(6 ata
Late First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas li	,,, e.c.,
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
	Oil-Bbis.	Water-Bbls.	Gas-MCF
Actual Prod. During Test	CIT-BAIS.		1 2000
			CI S.H
GAS WELL			0
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
		OU CONSERV	ATION COMMISSION
CERTIFICATE OF COMPLIAN	CE	OIL CONSERVA	- 11014 COMMISSIO14
		APPROVED JAN 31 197	7
i hereby certify that the rules and	regulations of the Oil Conservation	1.10 -4	14.44
Commission have been complied to above is true and complete to the	with and that the information given best of my knowledge and belief.	BY W.U.	race
	- <del>-</del>		
		TITLE	

(Signature) / Administrative Assistant (Title) 1-26-77 084 NMOCC-Art (Date) 1-Div 1-Hondo 1-Susp 1-RC

1-JMG

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.

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## UNITED STATES GOALDS GOALDS GOALDS GOALDS

	Budget Bureau	No. 42	-R1424
LEASE			٠.
C 0C70E0			

OMILD SIXILS	5. LEASE
DEPARTMENT OF THE INTERIOR	LC-067858
C/SF GEOLOGICAL SURVEY	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 Form 9–331–C for such proposals.)	7. UNIT AGREEMENT NAME DEC 29 1 31
1 oil — gas —	8. FARM OR LEASE NAME C C D Malco "S" Federal
well well well other  2. NAME OF OPERATOR	9. WELL NO.
Amoco Production Company	10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR	Scoggin Draw - Morrow Gas
P. O. Box 68, Hobbs, NM 88240	11. SEC., T., R., M., OR BLK. AND SURVEY OR
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17	AREA
helow )	11-18-27
AT SURFACE: 1650' FNL X 1653' FWL, Unit F	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL: Sec. 11, T-18-S, R-27-E AT TOTAL DEPTH:	Eddy NM
	14. API NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	
NECONO, ON OTHER BINN	15. ELEVATIONS (SHOW DF, KDB, AND WD)
REQUEST FOR APPROVAL TO: SUBSEQUENT	3587 ' RDB
TEST WATER SHUT-OFF   USE (G) S()	
FRACTURE TREAT SHOOT OR ACIDIZE	in minuted [] []
	1960 TE: Report results of multiple completion or zone
PULL OR ALTER CASING	change on Form 9–330.)
MULTIPLE COMPLETE	3.678
H U.S. GEOLOGIC	AL SHDVEY
(other)	Y MEXICO
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state including estimated date of starting any proposed work. If well is dimeasured and true vertical depths for all markers and zones pertinent.)	irectionally drilled, give subsurface locations and
Propose to acidize to increase production as Acidize with 8000 gal. 7-1/2% HCL NEFE acid s	follows: Install Tree Saver.
at a rate of 3-5 BPM as follows: (a) Run ga	mma rav-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 pum	ped; (f) Flush with 37 bbl.
of treated 2% KCL water; (g) Run after job ga	mma ray-temp. treatment evaluation
log; and (h) Swab back to recover load. Place	e well back on production.
0+4- USGS, A 1-Hou 1-Susp 1-CLF	그 하는 사람들은 사람들이 가득하는 모임 회장이 되었다.
	ခြောက်သည်။ သို့ ကိုသည်။ သို့ သို့ သည်။ မေး မြေမွန်မျို့သည် သည် သည် မြေမွေးကြား
0. ( 0.4. ) 17	
Subsurface Safety Valve: Manu. and Type	Set @ Ft.
18. I hereby certify that the foregoing is true and correct	
SIGNED Cathy J. Jorman TITLE Ast. Adm. Ana	lyst DATE 12-21-81
(This space for Federal or State offi	ce use) APPROVED
APPROVED BY TITLE	DATE
CONDITIONS OF APPROVAL, IF ANY:	
	DEC,28,1981
	1 1/11/1 5 1/2 1

\*See Instructions on Reverse Side

JAMES A. GILLHAM
DISTRICT SUPERVISOR

NM OIL CON COMMISSION Drawer DD

Artesia, NM 88210

Form 9-331 Form Approved. Dec. 1973 Budget Bureau No. 42-R1424 RECEIVED UNITED STATES 5. LEASE DEPARTMENT OF THE INTERIOR LC-067858 GEOLOGICAL SURVEYDEC 6. IF INDIAN, ALLOTTEE OR TRIBE NAME 7. UNIT AGREEMENT NAME SUNDRY NOTICES AND REPORTSOON WELLS (Do not use this form for proposals to drill or to deepen party pack to a different reservoir. Use Form 9-331-C for such proposals.) 8. FARM OR LEASE NAME Malco "S" Federal 1. oil well X other well 9. WELL NO. 2. NAME OF OPERATOR
Amoco Production Company L 1 10. FIELD OR WILDCAT NAME 3. ADDRESS OF OPERATOR Scoggin Draw Morrow Gas P. O. Box 68, Hobbs, NM 11. SEC., T., R., M., OR BLK. AND SURVEY OR **AREA** 4. LOCATION OF WELL (REPORT LOCATION CLEARLY, See space 17 11-18-27 below.) AT SURFACE: 1650' FNL X 1653' FWL, Unit F 12. COUNTY OR PARISH 13. STATE AT TOP PROD. INTERVAL: Sec. 11, T-18-S, R-27-E Eddy AT TOTAL DEPTH: 14. API NO. 16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 15. ELEVATIONS (SHOW DF, KDB, AND WD) 3587 RDB REQUEST FOR APPROVAL TO: SUBSEQU TEST WATER SHUT-OFF FRACTURE TREAT X SHOOT OR ACIDIZE REPAIR WELL Report results of multiple completion or zone PULL OR ALTER CASING DEC 3 1982 change on Form 9-330.) MULTIPLE COMPLETE CHANGE ZONES OIL & GAS ABANDON\* MINERALS MOMT. SERVICE (other) 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 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  $5\frac{1}{2}$ " 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-H0U 1-SUSP 1-CLF Subsurface Safety Valve: Manu. and Type \_\_\_ \_ Set @ \_\_\_\_\_ Ft. 18. I hereby certify that the foregoing is true and correct SIGNED (11) 20121 TITLE Ast. Adm. Analyst DATE 11-30-82 APPROVED (This space for Federal or State office use) APPROVED BY. Sgd.) PETER W. CHESTER TITLE DATE CONDITIONS OF APPROVAL, IF ANY: DEC 8 1982 FOR JAMES A. GILLHAM ee Instructions on Reverse Side

DISTRICT SUPERVISOR

RECEIVED BY					2
(November 1983)	CONS. COMMISSION	•		T. LICATE	Form approved. Budget Bureau No. 1004-013
JAN-11 9- POCK	דואט בו ניי	ED STATES	reverse	e side)	Expires August 31, 1985
Artesia	DEBARTMENT	OF THE INT	TERIOR		5. LEASE DESIGNATION AND SERIAL NO.
O. C. D.		LAND MANAGE	MENT		LC-067858
ANERSOL RESIGNON	<del></del>			D.A.CI	6. IF INDIAN, ALLOTTER OR TRIBE NAME
1a. TYPE OF WORK	LIFUR PERMIT	O DRILL, DE	EPEN, OR PLUG	BACK	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s
DRI b. TYPE OF WELL	נו 🗆	DEEPEN [	PLUG BA	ACK 🗌	7. UNIT AGREEMENT NAME
WELL X	ELL OTHER 7	Recomplete	SINGLE MULT	TIPLE _	8. FARM OR LEASE NAME
2. NAME OF OPERATOR	2 1 1. 1		,		Molco S' Federal
UMOCO // 3. ADDRESS OF OPERATOR	roduction Co.	meany /			9. WELL NO.
S. ADDRESS OF OPERATOR	10 Willan	M obsin			
4. LOCATION OF WELL (R.	eport location clearly and	11 08240	94-4-		10. FIELD AND POOL OR WILDEAT
At surface	1650' FNLX 1		ny State requirements.*)		Chalk Bligh Wolfcamp
					II. SEC., T., B., M, OR BLE. AND SURVEY OR AREA
At proposed prod. zone	e (SE/4 NW/4	Unit F)			11-18-27
14. DISTANCE IN MILES /	AND DIRECTION FROM NEAR	EST TOWN OR POST OF	FFICE*		12. COUNTY OR PARISH   13. STATE
					Eddy nm
15. DISTANCE FROM PROPO		16	3. NO. OF ACRES IN LEASE	17. NO. 6	OF ACRES ASSIGNED
PROPERTY OR LEASE L	INE, FT.			тот	HIS WELL
(Also to nearest drlg 18. DISTANCE FROM PROPE	OSED LOCATION*	19	PROPOSED DEPTH	20. ROTA	40 RY OR CABLE TOOLS
TO NEAREST WELL, DE OR APPLIED FOR, ON THE		Ì	7610'		an
21. ELEVATIONS (Show whe	ther DF, RT, GR, etc.)		1410	1 100	22. APPROX. DATE WORK WILL START
<i>358</i> 7	RDB				1
	NDD				į
		ROPOSED CASING	AND CEMENTING PROG	RAM	
	P		1	RAM	QUANTITY OF CEMENT
23.		ROPOSED CASING WEIGHT FER FOOT	SETTING DEPTH		QUANTITY OF CEMENT
SIZE OF HOLE	P	WEIGHT PER FOOT	1	5	70 Mg
SIZE OF HOLE	8IZE OF CASING  // 3/4"  8 5/6"	₩EIGHT PER FOOT 47 # 32 #	8ETTING DEPTH  /000' 6348'	5	70 Ms 300 Aso
size of Hole  15"  11"  7%"  pose to alara	SIZE OF CASING  11 1/4"  8 5/6"  51/2" Liner  On the Morrow	weight per foot  47#  32#  17#  of and recon	SETTING DEPTH  /000' 6348' 6277- /0/38'	5	70 Mg
size OF HOLE  15"  11"  7%"  opose to abana  4 with produci  I Hand set of  4 9490'.  Spot a 250' (  Aun CBL for  there is not a	SIZE OF CABING  1134"  85%"  51/2" liner  lon the Morrow  tion equipment  2IBP at 9500  (25 ex) class  2om 7500-65  2 good cmt. b	weight per foot  47#  32#  17#  2 and recon  and cap is  4 h neat p	SETTING DEPTH  1000' 6348' 6277-10138' will 35'(500)  Oly from 78  Cen 7000'-740	bolfcam so Class	170 sto 1300 sto 1355 spa 10 as follows:  10 H' nest cmt. Top of M.  10. × Place mud between splemental procedure
SIZE OF HOLE  15"  11"  7%"  Opose to abana  4 with product  1 H and set  4 9490'.  Spot a 250'  Chun CBL for there is not a  In above space describe to be reventer program, if any  H. Signed Hang	SIZE OF CASING  11 14"  8 78"  51/2" liner  Ion the Morror  tion equipment  2 TBP at 9500  (25 px) class  2 com 7500-65  2 good cmt. b  PROPOSED PROGRAM: If p  irill or deepen directional	WEIGHT PER FOOT  47#  32#  17#  2 and recon  and cap a  4 h neat p  600.  Fond between	SETTING DEPTH  1000' 6348' 6277-10138' well as the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of	Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Sof	170 sto 300 sto 355 sto 6 00 follows: 10 H' neat cont. Top of M
size of Hole  15"  11"  7%"  opose to abana  4 with product  I hand set  4 9490'.  Spot a 250'  Chun CBL for  I there is not a  cone. If proposal is to converter program, if any	SIZE OF CASING  11 14"  8 78"  51/2" liner  Ion the Morror  tion equipment  2 TBP at 9500  (25 px) class  2 com 7500-65  2 good cmt. b  PROPOSED PROGRAM: If p  irill or deepen directional	WEIGHT PER FOOT  47#  32#  17#  2 and recon  and cap a  4 h neat p  600.  Fond between	SETTING DEPTH  1000' 6348' 6277-10138' well as the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of the harmonic of	Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Softan,  Sof	170 ALS 1300 ALS 1350 ALS 1355 ALS 10 A rest cmt. Top of M 10. × Place mudbetives 10 Septemental procedure 10 Septemental procedure 10 Septemental procedure
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Top of M 10. × Place mudbetives 10 Septemental procedure 10 Septemental procedure 10 Septemental procedure
SIZE OF HOLE  15"  11"  7%"  1900e to aband  4 with product  1 Hand set  4 9490'.  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If p  proposed program: If p  irill or deepen directional  C. Class  ral or State office use)	WEIGHT PER FOOT  47#  32#  17#  2 and recon  and cap a  4 h neat p  600.  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Top of M 10. × Place mudbetives 10 Septemental procedure 10 Septemental procedure 10 Septemental procedure

#### \*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 cont behind pipe will be issued. W/4 DPJSPF using a 3/6"gun. 7046-62, 7090 - 7/00, and 7382-88 D RIH with RBP, the , and pler. Set RBP at 7450's pler. at 7280'. 8 Swob and flow test well De Stimulate Wolfcamp 7382-88' with 1000 gals 1570 NEFE Hel gelled acid W/add. and 1000 gals nongelled 15th NEFE Hel W/add. Flish with 30 bblo fresh water.

( ) Swab and flow test well W Release phr, lower and latch onto RBP. Pullup RBP to 7200' and spot 10" sand on Top. Set phr at 6850. (13) Stimulate Wolfcamp 7046-62' and 7090-7100' as follows: \* Tag all acid w/RA material a) Run before treatment GR Temp survey 7/70-6800 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 (4) Swob and flow test well (3) Release plar and POH with RBP, plar, and they.

(6) RIH with 236" they with seating night on bottom. Land they at 7450' and anchor at 7350' 1) 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 houndaries of the Section Well No. ompar Actual Footage Location of Well: North West 1650 1653 line and Ground Level Elev Dedicated Acreage: 3587 1. Outline the acreage descreted to the subject well by colored perfeit or habiture 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? If answer is "yes;" type of consolidation \_ Yes ∏ No 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 Commis-CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. 1650 1653 I hereby certify that the well location shown on this plat was platted from field notes of actual surveys made by me ar 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.

1000

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	C. C. D. ARTESIA, OFFICE	
	Farmere	

#### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

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

Revised 10-01-78
Format 06-01-83
Page 1

THANSPORTER SALL	,
OPERATOR REQUEST F	OR ALLOWABLE
PROMATUSH CERICIE	AND
	ISPORT OIL AND NATURAL GAS
1 moco Production Company	
P.O. Box 18 Holls 11 88240	
Commy (Circle ) subject 602/	Other (Please explain)
D	Request 1000 bbl testing allowable
Charge to Ownership	Condensaro 7090 - 7388 (Wolfamp perfo)
If change of ownership give name and address of previous owner	FOR PHANCE
II. DESCRIPTION OF WELL AND LEASE	
Miles S' Ferry Well No. Pool Name, Including	Whicamp State Federal or Fee LC - 067858
Unit Letter F : 1650 Feet From The North L	Ine and 1653 For 5 1 1/10 1 +
Line of Section // Township /8-5 Range	27-E, NMPH. Edd.
	County
III. DESIGNATION OF TRANSPORTER OF OIL AND NATURA	L GAS
The Kermian Corporation Person 15th 9/1/87	Address (Give address to which approved copy of this form is to be sent)
Name of Authorized Transporter of Casingness Gas or Dry Gas	Address (Give address to which approved copy of this form is to be sent)
If well produces oil or liquias, Unit Sec. Twp. Age.	Is das occupated when
If this production is commingled with that from any other lease or pool,	give commingling order number
NOTE: Complete Paris IV and V on reverse side if necessary.	order number:
I. CERTIFICATE OF COMPLIANCE	OIL CONSERVATION DIVISION
hereby certify that the rules and tegulations of the Oil Conservation Division have seen compared with and that the information given is true and complete to the best of	APPROVED MAR 6 1985
ny knowledge and belief.	CYOriginal Signed By  Lesile A. Clements
4 000	TITLE Supervisor District II
_ Naw C. Clark	This form is to be filled in compilence with RULE 1104.
asst. admin Gnahet	If this is a request for sllowable for a newly drilled or deepened will, this form must be accompanied by a tabulation of the deviation toute taken on the well in accordance with null iii.
3-1-85 (Tale)	All rections of this form must be filled out completely for allowable on new and recompleted wells.
OFS NMOCD, A IJRB 1-FIN 1-BCC	Fill out only Sections I. II. III. and VI for changes of owner, well name or number, or transported or other such change of condition
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Separate Forms C-104 must be filled for each pool in multiply completed wells.

Designate Type of Compl	ction - (X) OII Well Gos	Hell New Well	Motrovet	Doepen	Plug Back	Same ries'y	1000 5
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Floretton (DC Date					P.SS.	•	
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## STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

#### **OIL CONSERVATION DIVISION**

Drawer	DD	Arte	sia,	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.

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OIL CONSERVATION DIVISION

DISTRICT SUPERVISOR

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·	BUREAU OF	LAND MANAGEMENT		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
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1. OIL GAB WELL WELL	OTHER	NOV 1 5 1985		7. UNIT AGREEMENT NAME
2. NAME OF OPERATOR		NOA 19 1200		8. FARM OR LEASE NAME
AMOCO PRODUC		O. C. D.		Nalco "S Federal 9. WBLL NO.
P.O. BOX 68	HOBBS, NEW MI	XICO ARGESTA, OFFICE		/
4. LOCATION OF WELL (F See also space 17 belo At surface	leport location clearly a	nd in accordance with any	State requirements.*	Chalk Bluff Wolf Camp
1650	<u>2 ' F</u> <u>√</u> L x ∠	<u>'653'</u> F <u>W</u> L		11. SEC., T., E., M., OR SLK. AND SURVEY OR ARMA
(UNIT	F , SE/4,	NW/4)		12. COUNTY OF PARISON 13. STATE
14. PERMIT NO.		2 507 10 K	)	Eddin NM
300/5205/		ate Roy To Indicate N	ature of Notice, Report, o	r Other Data
	NOTICE OF INTENTION TO			SEQUENT REPORT OF:
TEST WATER SHUT-O	PELL OR	ALTER CASING	WATER SHUT-OFF	REPAIRING WELL
FRACTURE TREAT	<u>  </u>	E COMPLETE	FRACTURE TREATMENT	ALTERING CASING
SHOOT OR ACIDIZE	ABANDO	·  X	SHOOTING OR ACIDIZING	ABANDONMENT <sup>®</sup>
REPAIR WELL	CHANGE	PLANS		ults of multiple completion on Well
(Other)	R COMPLETED OPERATIONS	(Clearly state all pertineur	datails and give pertinent de	ompletion Report and Log form.) ites, including estimated date of starting any
proposed work. If nent to this work.)	well is directionally d	rilled, give subsurface locat	ions and measured and true ver	rtical depths for all markers and gones perti-
Propose to perma	anenthy Plug ? 1	Handon astollow	is: Notity BLM In	or commencing operations.
•		,	$\sigma$	U
1. MISU and				
				cement. Run CBL from 6000 to TCMT
			#/gal gelled brine (	
•		71		shoe and top of 5 1/2 "linee.)
<i>v</i> <sub>1</sub>			ross the TCMT found	lin step 2 above.
6. Perforate 8;	78" come from	~ 1050'-1049' with	4JSPF.	
7. RIH with 8%	8" cement reta	iner. Set retaine	vat±950'. Stingin	to retainer and pump 3005x class C
Neat cemen	t and circular	to to surface them	8 7/8 and 11 3/8 " brace	derhead on tlet.
8. Spotiosx Cla	ss (Neat com	ent from 40' to Say	bee. Remove well hea	dandnistall Px A Marker.
		FJN, 1 - CMH		
SIGNED SA	che moder	ring TITLE Adr	ninistrative Analys	t(SG) DATE 9/30/85
(This space for Fed	eral or State office use)	(1)		11.11.65
APPROVED BY	e s pari	TITLE		DATE 11-14-85
CONDITIONS OF A	PPROVAL, IF ANY:			

#### \*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	9-331
(May	1963)

### UI ED STATES UI ED STATES SUBMIT IN TRII (Other Instruction OF THE INTERIOR verse side)

ATE\*

Form approved. Budget Bureau No. 42-R1424. 5. LEASE DESIGNATION AND SERIAL NO.

LC-067858 6. IF INDIAN, ALLOTTEE OR TRIBE NAME

GEOLOGICAL SURVEY

SHNDRY	NOTICES	AND	<b>REPORTS</b>	$\bigcirc N$	WFIIC
SUNDE	NOTICES	MINU	REFURIS	UN	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.	WELL GAS OTHER DRILLING	7. UNIT AGREEMENT NAME
	NAME OF OPERATOR  OF THE UCTION COMPLINY V	8. FARM OR LEASE NAME MALCO "A" Jederal
3.	ADDRESS OF OPERATOR  10. 110898, N. M. 88240	9. WELL NO.
4.	1650 FNL × 1653 FWL Sec 11 (Unit F, SE/4114/4)	10. FIELD AND POOL, OR WILDCAT  WILD CAT  11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
	(000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 00	11-18-27 NMPN

14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.)

04

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

				., .,	
NOT	ICE OF	INTENTION TO:		SUBSEQUENT REI	PORT OF:
TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE REPAIR WELL (Other)		PULL OR ALTER CASING MULTIPLE COMPLETE ABANDON* CHANGE PLANS		WATER SHUT-OFF FRACTURE TREATMENT SHOOTING ON ACIDIZING  (Other) Output (NOTE Report results of mult Completion or Recompletion Re	the completion on Well
VECULUS DECEMBED OF CO	MALETI	en openimova /Clearly state	. 11		

OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting if well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones p

proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and z

Mobile Drig Co Spuddled 15" hole 2:30 Pm 10-16-71.

On 2-18-71, 1134" OD 47" K-55 Cassing was set

@ 1000' w/ 970 Sx Incor. 2% CACL 1 570" Tofplug.

Cement circ. Gyter TUDC 18 hours. Tested Cog

w/ 8000 ps, Joh 30 min. Jest O.K.

Liducled hole to 11" @ 1000' and resummed.

drilling.

RECEIVED

OCT 22 1971

O. C. S. ARTESIA, OFFICE

19 I houshy anatie the			
SIGNED	it the foregoing is true and con	AREA SUPERINTENDENT	DATE 357 2 0 177
APPROVED BY CONDITIONS OF A		*See Instructions on Reverse Side	DATE NO. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No. 12 No.

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U TED STATES SUBMIT IN TRI SATE Budget Bureau No. 42-R1424.

DEPARTMENT OF THE INTERIOR (Other Instructio. on re
S. LEASE DESIGNATION AND SERIAL NO.

	GEOLOGICAL SURVEY		10.057858
SUNDR (Do not use this form Us	6. IF INDIAN, ALLOTTEE OR THIBE NAM		
1. GAS GAS	OTHER DRILLING		7. UNIT AGREEMENT NAME
2. NAME OF OPERATOR			8. FARM OR LEASE NAME
Arnoco Productio	on Company /		MALCO A JULY
3. ADDRESS OF OPERATOR BOX 63, HOBBS, N. M	A 88240		9. WELL NO.
	rt location clearly and in accordance with	any State requirements.*	10. FIELD AND POOL, OR WILDCAT
At surface			MILDCUT
1650 FML × 1	1653 FWL Sec. 11 (	F. SE/4 NW/4)	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
	`		11-18-27 MMP
14. PERMIT NO.	15. ELEVATIONS (Show whether 3587)	Pr DF RT, GR, etc.)	12. COUNTY OR PARISH 13. STATE
10			12000 1 1111
	Check Appropriate Box To Indicate		
	CE OF INTENTION TO:	<b>S</b>	QUENT REPORT OF:
TEST WATER SHUT-OFF FRACTURE TREAT	MULTIPLE COMPLETE	WATER SHUT-OFF FRACTURE TREATMENT	REPAIRING WELL ALTERING CASING
SHOOT OR ACIDIZE	ABANDON*	SHOOTING OR ACIDIZING	ABANDONMENT*
REPAIR WELL (Other)	CHANGE PLANS	(Other)(Note: Report resul	ts of multiple completion on Well
proposed work. If wel nent to this work.) *	MPLETED OPERATIONS (Clearly state all pertilistics directionally drilled, give subsurface	inent details, and give pertinent data locations and measured and true vert	es, including estimated date of starting a ical depths for all markers and zones be
18 hours. Jest O.K	/300 s4. Class Tested Cusine	141/	for 30 min
18 hours, Test O.K Reduced	+ + 1' 1 . · ·	g. W/1500 ps.	for 30 min
18 hours, Ilst O.K Reduced	tested cusine	g. W/1500 ps.	after NOC. To r 30 min
18 hours, Ilst O.K Reduced	tested cusine	g. W/1500 ps.	after noc. Jor 30 mi
18 hours, Ilst O.K Leduced	tested cusine	g. W/1500 ps.	after NOC for 30 min
18 hours, Ilst O.K Leduced	tested cusine	g. W/1500 ps.	RECEIVE
18 hours, Test O.k Leduced	tested cusine	g W/1500 ps.	RECEIVEL NOV 15 1971
18 hours, Jest O.k Reduced	tested cusine	RECEIVED  NOV 16 1971  G. C. C.	RECEIVEL NOV 15 1971 U. S. GROLORICAL SUP-
18 hours, Test O.k Leduced	tested cusine	RECEIVED  NOV 16 1971	RECEIVE NOV 15 1971 U. S. GOLOGICAL SUP-
	tested Cusing hole to 718 @ 6	RECEIVED  NOV 16 1971  C. C. C.  ARTESIA, OFFICE	RECEIVEL NOV 15 1971 U. S. GROLORICAL SUP-
	tested Cusing hole to 718 @ 6	RECEIVED  NOV 16 1971  G. C. C.	RECEIVEL NOV 15 1971 U. S. GROLORICAL SUPPLY
18. I hereby certify that the	hole to 7% @ 6	RECEIVED  NOV 16 1971  C. C. C.  ARTESIA, OFFICE	RECEIVEL NOV 15 1971 U. S. GROLORICAL SONARTERIA, MSW MICHIEL
18. I hereby certify that the	foregoing is true and correct  TITLE  TITLE	RECEIVED  NOV 16 1971  C. C. C.  ARTESIA, OFFICE	RECEIVEL NOV 15 1971 U. S. GROLORICAL SUP- ARTERIA, HSW MICHIO
18. I hereby certify that the SIGNED (This space for Federal of APPROVED BY	foregoing is true and correct  TITLE  TITLE	RECEIVED  NOV 16 1971  C. C. C.  ARTESIA, OFFICE	RECEIVEL NOV 15 1971 U. S. GROLOGICAL SUP- ARTESIA, MSV MARTIN
18. I hereby certify that the  SIGNED  (This space for Federal of APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPROVED BY CONDITIONS OF APPR	foregoing is true and correct  TITLE  OF State office use)  TITLE	RECEIVED  NOV 16 1971  C. C. C.  ARTESIA, OFFICE	RECEIVE NOV 15 1971 U. S. GROLOGICAL SUPARTERIA, MSV MAXIM
18. I hereby certify that the SIGNED	foregoing is true and correct  TITLE  OF State office use)  TITLE	RECEIVED  NOV 16 1971  C. C. C.  ARTESIA, OFFICE	NOV 15 1971 U. S. GROLOGICAL SUPARTERIA, HSV MIXIO

Form 9-331 U TED STATE (May 1965)  DEPARTM: IT OF THE	SUBMIT IN TR' CATE Porm approved.  NTERIOR verses side)  SUBMIT IN TR' CATE Budget Bureau No. 42-R1421  5. LEASE DESIGNATION AND SERIAL NO.
GEOLOGICAL SU	1
SUNDAY NOTICES AND REP	
OIL GAS TO OTHER	7. UNIT AGREEMENT NAME
2. Since of organical Company	8. FABM OR LEASE NAME
3. Address of operator	9. WELL NO.
<ol> <li>LOCATION OF WELL (Report location clearly and in accordance Sec also space 17 below.)</li> <li>At surface</li> </ol>	1,9110000
1088 3111 : 1988 FUL Sec.	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
14. PERMIT NO. 15. ELEVATIONS (Show	whether DF, RT, GR, etc.)  12. COUNTY OR PARISH 13. STATE
16. Check Appropriate Box To li	dicate Nature of Notice, Report, or Other Data
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF PULL OR ALTER CASING PRACTURE TREAT MULTIPLE COMPLETE SHOOT OR ACIDIZE ABANDON* RUPAIR WELL CHANGE PLANS (Other)	WATER SHUT-OFF  FRACTURE TREATMENT  SHOOTING OR ACIDIZING  (Other)  (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
17. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work. If well is directionally drilled, give subspent to this work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (CLEARLY state proposed work.)  1. DENCRIPE PROPOSED OR COMPLETED OPERATIONS (CLEARLY state proposed work.)  1. DENCRIPE PROPOSED OR COMPLETED OPERATIONS (CLEARLY state proposed work.)  1. DENCRIPE PROPOSED OR COMPLETED OPERATIONS (CLEARLY state proposed work.)  1. DENCRIPE PROPOSED OR COMPLETED OPERATIONS (CLEARLY state proposed work.)  1. DENCRIPE PROPOSED OR COMPLETED OPERATIONS (CLEARLY state proposed work.)  1. DENCRIPE PROPOSED OR COMPLETED OR COMPLETED OPERATIONS	I pertinent details, and give pertinent dates, including estimated date of starting any face locations and measured and true vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones pertined and zones
Evaluating.	RECEIVED

DEC29 1971 U. S. GOLGEGAL SAME ARTERIA, PARA SAME

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S. I hereby certify SIGNED	that the foregoing is true and	AREA SUPERINTENDENT	DATE
APPROVED BY	FAPPROVAL, IF ANY:	TITLE LISTRICE ENGINEER	DADEC 2 9 1971

\*See Instructions on Reverse Side

Form	9-330
(Rev.	5-63)

## N. M. O. C. C. CORY

SUBMIT IN DUP. ATE.

O TED STATES	
DEPARTMENT OF THE INTE	RIOR
GEOLOGICAL SURVEY	

(See other instructions on reverse side) 5.

LEASE	DESIGNATION	AND	SERIAL	
10	0070	_	0	

GEOLOGICAL S	URVEY	LC-067858
WELL COMPLETION OR RECOMPLE	TION REPORT AND LOG	* 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
1a. TYPE OF WELL:  OIL GAS WELL WELL	DBY Rthe	7. UNIT AGREEMENT NAME
b. TYPE OF COMPLETION:		
NEW WELL OVER DEEP DACK DEACK D	ESVR. Other	S. FARM OR LEASE NAME
Amoco Production Company	JAN 7 1972	MALCO FEDERAL
3. ADDRESS OF OPERATOR		3
BOX 68, HOBBS, N. M. 88240	ART	10. FIELD AND ROOL, OR WILDCAT
4. LOCATION OF WELL (Report location clearly and in accordan		WILDCAT- 8-429/
1650 FNL V 1653 FWL Sec. 11 (7,	SWI4 NWIA)	11. SEC., T., B., M., OR BLOCK AND SURVEY OR AREA 5-1-72
At total depth		11-18-27 NMD00
	PERMIT NO. DATE ISSUED	12. COUNTY OR 13. STATE
		FDDV N.M.
15. DATE SPUDDED 16. DATE T.D. REACHED 17. DATE COMPI		, REB, RT, GR, ETC.) 19. ELEV. CASINGHEAD
	20-7   3587 22. IF MULTIPLE COMPL., 2 23. INTER	K. D. B.
10.100		RVALS ROTARY TOOLS CABLE TOOLS
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTO	M, NAME (MD AND TVD)*	25. WAS DIRECTIONAL
		SURVEY MADE
9621-9929		No S
26. TYPE ELECTRIC AND OTHER LOGS RUN		27. WAS WELL CORED
GR-N, PROX, PROSITY, ETC.	CORD (Report all strings set in well)	<u></u>
CASING SIZE WEIGHT, LB./FT. DEPTH SET (MD)		ENTING RECORD AMOUNT PULLED
11 34" 47" 1000	15. 970	Sx
8 5/6" 32 6348	300	
5 1/2" LINER 17" 6277-10138	7 1/8" 855	
29. LINER RECORD	1 30.	TUBING RECORD
	CEMENT* SCREEN (MD) SIZE	DEPTH SET (MD)   PACKER SET (MD)
	2 3/8	9504 9491
31. PERFORATION RECORD (Interval, size and number)		
	82. ACID, SHOT,	FRACTURE, CEMENT SQUEEZE, ETC.
9621-27, 67-72, 82, 86 9735, 39, 42, 72, 75-84, 91-95 9851-56, 58, 64, 66;	97.35- 9929	200 000 10 % UCC y 29 1/C/
9851-56' 58' 64' 66'	J.W- J727	300 gar 10% HCF X 3% HCL
9329		
w/2JSPF		
33.*  DATE FIRST PRODUCTION   PRODUCTION METHOD (Flowing.	PRODUCTION gas lift, pumping—size and type of pum	p)   WELL STATUS (Producing or
12-16-71 FLW		SHUT-IN
	o'n. for oil—bbl. gas—mci	
FLOW. TUBING PRESS.   CASING PRESSURE   CALCULATED   OIL-		WATER—BBL.   OIL GRAVITY-API (CORR.)
2035-2689 PKR 24-HOUR RATE	56 JASF	o 54°
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)	1 1538	TEST WITNESSED BY
TO BE SOLD - MARKET HEN	DING	RECEVED
NONE		JAN- 6 1972
36. I hereby certify that the foregoing and attached informati	ADEA SUIDEDINITENIDENT	trom all available records
4565- A27	TITLE FALLY OUTCOMPLICATION	MICON -

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

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 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 Extractions on litens 22 and 24, and 33, below regarding separate reports for separate completions.

If the deep prior can be submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure this form, see iten 35.

Here of the deep prior can be submitted, copies of all currently available logs (drillers, geologists, sample and regulations. All attachments should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments about the federal requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or regional can be supplicable state of the completion, so state in item 22, and in any attachments. Here, 2 and 24 ft this well is completed for separate production from more than one interval zone (multiple completion), so state in item 24 show the producing interval to be separately produced, showing the additional data pertinent to such interval.

From 25 and 25 and 24 ft this well storm, additional data pertinent to such interval.

From 27 and 28 and 28 above.)

TRUE VERT. DEPTH j jake kir na diriji jira na narawa 3 77f 1900 RO ROT TOP 17-2000 Compound uction to 17-2000 Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Compound Co MEAS. DEPTH GEOLOGIC MARKERS 140000 M. M. 20004: NAME 38. 7.788 (10) 850 S. 1717 875.5 1717 875.5 SUMMARY OF POROUS ZONES:

BHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THERROF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING
DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, PLOWING AND SHUT-IN PRESSURES, AND RECOVERIES TRACE CON NESSECUEDO 12-5 -05 116 41 .22 2011 SS2S Legione com aux Prox Pieco ETC. DESCRIPTION, CONTENTS, CASCAGE DESCORD (00) THE HT920 4 Berolinsa 5.E LINER RECORD \_5/€ (div) Monton eq. 29 Ò, of gams) では SOU K.UOKE 1611, 21005 1611, 21005 .1017 -- 87 1296 CATCULATED 24-1900 RATE รับนักเกิดที่สั T. FORMATION that the foregoing and attached information is SUPE Data on Reverse Side) (See Instructions and Spaces for Additional  $\supset$ 

GOVERNMENT PRINTING OFFICE: 1963—O-683636

7,458

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2015 

4.

SFIATE GET.

\* .

18. I hereby certify t	hat the foregoing is true and	correct			
SIGNED	2.2	A	REA SUPERINTENDENT	DATE 1 9 1872	_
APPROVED BY		TITLE	DISTRICT ENGINEER	FEB 2 1972	_
SGS HET SON	ADPROVAL, IF ANY:				

\*See Instructions on Reverse Side

NO. OF COPIES RECEIVED		15	
DISTRIBUTION			
SANTA FE			
FILE			1
U.S.G.S.			
LAND OFFICE			I
TRANSPORTER OIL GAS		1	
OPERATOR		,	
		i	

## NEW MEXICO OIL CONSERVATION COMMISSION REQUEST FOR ALLOWABLE

AND RECEETIVES PRAISPORT OIL AND MATHRAL CAS

Form C-104 Supersedes Old C-104 and C-110 Effective 1-1-65

-	0.5.6.5.	AU THURIZA HUN TU TRA	NSPURT UIL AND	NATURAL G	AS	
	LAND OFFICE					
	OIL I	DEC 25 1972	SURVEYS - BACK	SIDE)		
	TRANSPORTER GAS	DEC-2 9 13/2				
- H	OPERATOR					
H		O. C. C.			API-30-01	5-20510
1.	PRORATION OFFICE	ARTESIA, DEFICE				20320
	Amoco Production C	ompany Charles				
1						
ł	Address	40				
	BOX 68, HOBBS, N. M. 8824					
1	Reason(s) for filing (Theck proper box)		Other (Plea	se explain)		
- 1	New Well [X]	Change in Transporter of:				
	Recompletion	Oil Dry Ga	s <b>X</b>			
- 1	Change in Ownership	Casinghead Gas Conder	sate			
L					<del></del>	
1	f change of ownership give name					
á	ind address of previous owner					
	DESCRIPTION OF WELL AND I	LEASE		Kind of Lease		1 1
j	Leane Name	Well No. Pool Name, Including Fo		į.		Legse No.
	MALCO "S" FEDERAL	1 SCOGGIN DRAW-	MORROW Lake	State, Federa	l or Fee FED	LC-067858
ı	Location					
-	Unit Letter F; 16!	50 Feet From The NORTH Lin	e and 1653	Feet From 1	The WEST	
	Oint Better					
1	Line of Section 11 Tow	vnship 18-S Range	27-E , NMF	M, EDDY		County
L						
11	DESIGNATION OF TRANSPORT	TER OF OIL AND NATURAL GA	ıs			
4#.	Name of Authorized Transporter of Oil	or Condensate	Address (Give addres	s to which approx	ved copy of this form	is to be sent)
Ì			P 0 Row 31	10 Midler	d Tayes 797	701
	Amoco Production Companion of Authorized Transporter of Cas	If (If UCKS)  or Dry Gas  n	Address (Give addres	s to which appro-	nd, Texas 797 ved copy of this form	is to be sent)
i		A 4 4				
l	Amoco Production Compan		P. O. Box 68			3240
ļ	If well produces oil or liquids,	Unit Sec. Twp. Rge.	1	sted?   whe	_	,
1	give location of tanks.	F 11 18-S 27-E	Yes		12-27-72	
,	f this production is commingled wit	th that from any other lease or pool,	give commingling ord	er number:		
	COMPLETION DATA					
		Oil Well Gas Well	New Well Workove	r Deepen	Plug Back   Same I	Restv. Diff. Restv.
	Designate Type of Completic	on = (X)	X :	1	1	
	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 Oll/Gas Pay		Tubing Depth	
	•		9,621		9.504'	
	3587' RDB	Penn-Morrow	7,021		Depth Casing Shoe	
	Perforations	21 061 07251 201 421 721	751 0/1 011 0		10	.138'
	9621 - 27 , 67 - 72 , 8	2',86',9735',39',42',72'	,/5 - 64 , 91 - 9	<u>5. 40515</u>	10	130
	58',64',66',9929'	TUBING, CASING, AN			<del></del>	
	HOLE SIZE	CASING & TUBING SIZE	DEPTH	SET	SACKS C	
	15"	11-3/4"	1000'		970 \$	
	11"	8-5/8"	6 <b>348</b> '		300 8	
	7-7/8"	5-1/2"	6277'-1	0138'	855 9	SX
		2 3/8"	9504 pp			
•	TOTAL AND DECIDED D		ifter recovery of total vo		and must be squal to	or exceed top allow-
V.	TEST DATA AND REQUEST FO	able for this de	epth or be for full 24 ho	urs)		
	OIL WELL Date First New Oil Run To Tanks	Date of Test	Producing Method (F		ift, etc.)	
	Date i list from Oil from 10 Talles			•		
		Tubing Pressure	Casing Pressure		Choke Size	
	Length of Test	rannia Liebama				
		Tour But-	Water - Bbls.		Gas-MCF	<u> </u>
	Actual Prod. During Test	Oil-Bbls.	174501 - DMIEN		1	
			<u> </u>		1	
	GAS WELL					
	Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/Mi	ACF	Gravity of Condens	ate
	AAOF - 10785	4 Hr.	12		54 <b>0</b>	
	Testing Method (pitot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Sh	ut-in)	Choke Size	
	4 - Pt	2862	PKR	-	VARIOUS	3
				CONCEDIA	ATION COMMISS	
VI.	CERTIFICATE OF COMPLIAN	CE	11			NON
			APPROVED D	EC 29 197	'2	
	I hereby certify that the rules and	regulations of the Oil Conservation	APPROVED	A 11	-1	,
	Commission have been complied to	with and that the information given e best of my knowledge and belief.		16 Stree	sell	
	above is true and complete to the	e nest or my knowledge and netter.	11 = 1			

(Signature) AREA SUPERINTENDENT

Granius

(Title)

12-27-72 0 & 4 - NMOCC-Art \_1\_\_Div\_ 1 - JEL 1 - OBP 1 - Susp 1 - RRY (Date) 2 - Hondo

TITLE \_\_\_\_\_ 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

DEVIATI	ON SURVEYS
	DEGREES
DEPTH	OFF
740	1/2
1300	1/4
1670	1/4
2040	1/4
2460	1/2
2790	1/2
<b>2</b> 970	1-1/4
3500	3/4
4000	3/4
4560	10
4890	10
5100	1-1/4
5610	1
6020	2-1/2
6195	2-1/2
6 <b>34</b> 5	2
6970	2-1/4
75 <b>1</b> 0	1
8152	1-3/4
9430	3/4
10165	1

The above are true to the best of my knowledge.

AREA SUPERINTENDENT Engineer

Sworn to this date. December 27, 1972

NOTARY PUBLIC IN & FOR LEA COUNTY, NEW MEXICO

MY COMMISSION EXPIRES & 15-76



THE OTH COMESSION - COMMISSION 
Form 9-331 Dec. 1973

Form Approved. Budget Bureau No. 42-R1424

UNITED STATES	E 15405
DEPARTMENT OF THE INTERIOR	5. LEASE RECEIVED
GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
OUNDRY NOTICES AND DEPORTS ON WELLS	7. UNIT AGREEMENT NAME MAY - 6 198
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.)	8. FARM OR LEASE NAME
1. oil gas well other	Malco "S" Federal ARTESIA, OFFICE 9. WELL NO.
2. NAME OF OPERATOR	1
Amoco Production Company /	10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR	Scoggin Draw-Morrow Gas
P. O. Box 68, Hobbs, New Mexico 88240  4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
AT SURFACE: 1650' FNL x 1653' FWL, Unit F	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL: Sec. 11 T-18-S. R-27-F	Eddy NM
AT TOTAL DEPTH:	14. API NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,	
REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD)
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:	3587 ' RDB
TEST WATER SHUT-OFF	
FRACTURE TREAT	
SHOOT OR ACIDIZE	(NOTE: Report results of multiple completion or zone
PULL OR ALTER CASING	change on Form 9–330.)
MULTIPLE COMPLETE   CHANGE ZONES	
ABANDON*	
(other)	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly statincluding estimated date of starting any proposed work. If well is dimeasured and true vertical depths for all markers and zones pertiner  Moved in service unit 3-2-82. Ran swab for level 2100 ft. from surface. Final fluid 1 Ran gamma ray temp. log. Pumped 8000 gal 7 staged with 150 ball sealers. Ran after gam log. Ran swab with light show of gas. Mov Flow tested for 48 hrs. and flowed 342 MCF.	irectionally drilled, give subsurface locations and not to this work.)*  8 hrs. with initial fluid evel 9400 ft. from surface.  1-1/2% HCL NEFE acid with additives ma ray and temp. treatment ed out service unit 3-8-82.
	1092
O+4-USGS, A 1-Hou 1-Susp 1-CLF	APR 2 7 1982
	SURVEY
Subsurface Safety Valve: Manu. and Type	U.S. GEOLOGICAL SURVEY
18. I hereby certify that the foregoing is true and correct	ROSWELL, NEW MEXICO Ft.
1 ath of the new New New New New New New New New New N	. ,—
SIGNED Cittly & Joseph TITLE AST. Adlil. AF	WITH STATE
(This space for Federal or State of	fice use)
APPROVED BY TITLE	THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY O
CONDITIONS OF APPROVAL, IF ANY:	MAR 22 1982
*See Instructions on Reverse	Side OIL & CAS SURVEY  U.S. CEOLOGICAL SURVEY  U.S. CHOOG HEN MEXICO

Form 9-331

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1. 7. 12 E W.

Form Approved.

Dec. 1973		ACL	,,,,,	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Budget Bur	eau No.	42-R1424
	UNITED STA	ATES	ſ	5. LEASE			
	DEPARTMENT OF TI	HE INTERIOR	1	LC-	-067858		
c/SF	GEOLOGICAL S	SURVEY			ALLOTTEE OR	TRIBER	CEIVED
	Y NOTICES AND R form for proposals to drill or t form 9-331-C for such proposals			7. UNIT AGRE	EMENT NAME	MAY	- 4 198
reservoir. Use fo	rm 9-331-C for such proposals	i.)		8. FARM OR L	EASE NAME		
1. oil well	gas well other			Malco "S 9. WELL NO.	S" Federal	ARTESI,	C. D. A, OFFICE
2. NAME OF	OPERATOR			1			
Amo	oco Production Com	ipany /		10. FIELD OR V			
	OF OPERATOR			Scoggin	Draw-Morr	ow Ga	S
P.	0. Box 68, Hobbs,	New Mexico	88240	11. SEC., T., R	., M., OR BLK.	AND SL	JRVEY OR
	N OF WELL (REPORT LOC			AREA			
below.)	1650' FNL x	( 1653' FWL, U	nit F	11-18-2			
AT SURF	ACE: PROD. INTERVAL: Sec.	11. T-18-S.	R-27-F	12. COUNTY O	R PARISH 13.		
AT TOTAL		11, 1 10 0,		Eddy		NM	
				14. API NO.			
	APPROPRIATE BOX TO IN OR OTHER DATA	IDICATE NATURE O	F NOTICE,				
KLI OKI,	OR OTHER DATA			15. ELEVATION		KDB,	AND WD)
REQUEST FO	R APPROVAL TO:	SUBSEQUENT REPO	RT OF:	358	37 ' RDB		
TEST WATER							
FRACTURE TI		ā	~		ر المستخدم الموسيد المستخدم المستخدم المستخدم المستخدم المستخدم المستخدم المستخدم المستخدم المستخدم المستخدم ا المستخدم المستخدم ال	:	
SHOOT OR A		$\square$	3				
REPAIR WELL			***************************************	(NOTE: Report	results of multiple		tion or zone
PULL OR ALT	<b>=</b>	Ц	į		on Form 9-330.)		
MULTIPLE CO CHANGE ZON	· <del>-</del>	님	g İ	₩ EPR 23	1982		
ABANDON*	<b>'</b> ''	H	Ť	•i k	i transmit	,	
(other)	L			2.1.2	OAS		
			·····	- 0.5. GLOLUGI <del>- loswei ne</del>	DAL MATERIAL		
including	BE PROPOSED OR COMPLI g estimated date of starting d and true vertical depths f	g any proposed work	<ul> <li>If well is d</li> </ul>	irectionally drilled	etails, and give d, give subsurf	e pertin ace loca	ent dates, ations and
		:					
500 550 XL- 10 <sub>1</sub>	ved in service uni 00 ft. from surfac 00 gal XL-4 gel, 2 -4 gel, 1-1/4 gal # gel. Flow teste 08 MCF. Returned	e. Final flu 2750 gal CO2, CO2 , and 231 ed for 96 hrs.	id level and 2310 0# 20/40 and flow	9000 ft. fr # 20/40 sand sand. Flus	rom surfact d. Pumped shed with	e. P 2500 48 bb	umped gal ls
	4-USGS,A 1-Hou	•	1-CLF		Set @ .		Ft
Subsulface S	raicty vaive, Mailu, and Typ	JC			set @ .		г

ACCEPTED FOR RECORD

(Inis space for Federal or State office use)

SIGNED Cathy & German TITLE AST. Adm. Analyst DATE 4-19-82

APPROVED BY CONDITIONS OF

APPROVAL, IF ANY CHESTER

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

3 1982

\_\_\_ DATE \_

MAY

U.S. GEOLOGICAL SURVEY. See Instructions on Reverse Side ROSWELL, NEW MEXICO

Form 9-331

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PULL OR ALTER CASING MULTIPLE COMPLETE CHANGE ZONES ABANDON\* (other)

Form 9–331 Dec. 1973	Form Approved.
UNITED STATES  DEPARTMENT OF THE INTERIOR  GEOLOGICAL SURVEY	5. LEASE 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 Form 9–331–C for such proposals.)	7. UNIT AGREEMENT NAME
1. oil gas well other of C	8. FARM OR LEASE NAME Malco "S" Federal 9. WELL NO.
2. NAME OF OPERATOR AMOCO Production Company ARTESIA, OFFICE	1 10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR P. 0. 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:	Scoggin Draw Morrow Gas  11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  11-18-27  12. COUNTY OR PARISH 13. STATE Eddy  NM
AT TOTAL DEPTH:  16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  .	14. API NO.  15. ELEVATIONS (SHOW DF, KDB, AND WD)  3587 RDB
REQUEST FOR APPROVAL TO:  SUBSEQUENT REPORT OF:  TEST WATER SHUT-OFF	(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.

Substitute Blattery Raive: Mathe Vand Type US	SP 1-CMH 1-W. Stafford, HOUset@	 Ft
18. I hereby gerryly that the foregoing is true	e and correct	
	TITLE Ast. Adm. Analyst DD C 1887	
	Thi ACCEPTED FOR RECORDS 0)	
APPROVED BY	TITLE PAPE DATE FER 1 6 1092	
CONDITIONS OF APPROVAL, IF ANY:	.HI 71983	
	JUL 1 1000 Bill b SAS	

See Instructions on Reverse Side ROSWELL, NEW MEXICO

RODWELL, NEW MEXICO

	ar a control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the		Form approved
Form 3160-5 November 1983)	UN! LD STATES	ia, NM 88210 submit in Tripl re.	Form approved.  Budget Bureau No. 1004-0135  Expires August 31, 1985
Formerly 9231	PARTMENT OF THE INTE	<b>_</b>	5. LEASE DESIGNATION AND SERIAL NO.
RECEIVED BY	EUREAU OF LAND MANAGEME		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
FEB. 28 SUNDRY	proposals to drill or to deepen or plu	ON WELLS g back to a different reservoir. a proposals.)	٠.
OIL O. C. D.	OTHER Recompletion		7. UNIT AGREEMENT NAME
amsco Prode	ection Company		Malco S Federal
3. ADDRESS OF OPERATOR	Hobbs Dry 882	,40	9. WELL NO.
4. LOCATION OF WELL (Report 1 See also space 17 below.)	location clearly and in accordance with a	ny State requirements.*	10. RIELD AND POOL, OR WILDCAT
At Burface 1650	FNL X 1653 FWL		11. SRC., T., R., M., OR MES. AND
(SE/4.	, NW/4, Unit F)		11-18-27
14. PERMIT NO.	15. ELEVATIONS (Show whether 3587 RDB		12. COUNTY OF PARISH 13. STATE
16. Ch	neck Appropriate Box To Indicate	Nature of Notice, Report, or C	Other Data
NOTICE	OF INTENTION TO:	BUBSEQ	UENT REPORT OF:
TEST WATER SHUT-OFF FRACTURE TREAT	PULL OR ALTER CASING MULTIPLE COMPLETE	WATER SHUT-OFF FRACTURE TREATMENT	REPAIRING WELL ALTERING CASING
SHOOT OR ACIDIZE  REPAIR WELL	ABANDON* CHANGE PLANS	SECOTING OR ACIDIZING (Other)	ABANDONMENT*
(Other)		Completion or Recomp	of multiple completion on Well letion Report and Log form.)
17. DESCRIBE PROPOSED OR COMPI proposed work. If well in nent to this work.) *	LETED OPERATIONS (Clearly state all perticis directionally drilled, give subsurface k	nent details, and give pertinent dates, ocations and measured and true vertice	including estimated date of starting any al depths for all markers and zones perti-
	eased skt. and spull	ed llg. Han east	viron bridge plug
and set at 9495	! Pumped 5 sx Cla	iss H cmr. Spotted	gel plug 9432"-
9683 . Sported 25	ex class Hyplug	7863-76131. Pw	elled tog. Perfd
7046-7062,7090	7-7100, 7382-738	38 with 45PF. Ka	n tog V, plet and ser
retrievable brid	ge soluge at 7444.	Pulled they and	set bell at 7280.
Swood. acidigla w	with 1000 guls. 15 and reset at 684	% NEFE HCL and 2'. Iested webs. to	500 policy of
Swood necessition of			500 PSI and OK. Swbd.
Ser reviewance in	in show and a	eidered with 500	10 galo gelled 15%
NE FE HAI Japond	Radio actual material.	Han atter - treater	Tind purply . Swbd .
			head stating niggle
	Cleaned out pand		
J+5-BEM, C 1-JRB	1-FJN 1-GCC 2-	nmoco, A	V
18. I hereby certify that the fo	Coble TITLE	lministrative anal	2-22-85
(This space for Federal or		V	
APPROVED BY CONDITIONS OF APPROV	ALA IF ANY:		DATE
EC	18 2 0 1925		Post 2-85
1.6		ons on Reverse Side	3- P+ PT WILL.

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 and Market Englisher Englishers of fraudishent statements or representations as to any matter within its jurisdiction.

tail-pipe, tto, and tto, anchor. Seating nipple landel at 7441, and set tto anchor ar 7005' Than while and pmp. MOSU
1-30-85. Built wellhead and connected to flur line on 1-31-85.
Began pmp testing 2-1-85. Pump tested approx. 8 dasp. Lash
24 hrs. pmpd 10 80 × 180 BW × 0 MCF. MISU 2-V1-85.
Pulled world and pmp. Pulled tto, and ran plu., seating nipple and tto. Helicipable bridge plug set at 7150'. Dested
RBP to 1000 F81 and OK. Set plus, las 7073'. Swild. Released plus, han too and latched on to RBP. Pulled tto. Than Cast with

bridge plug and set at 7080'. Kan emt. red. and set at 6962'.
Pumped 16 ex Class H Neat. Heursel out 5 ex emt. POOH.

Brilled out cout. to 7070'. Han ttog. and tagged cast vion bridge plug at 7080'. Pulled ttog., brill collar and bit. Than omt.

retainer and set at 6955'. Squeezel 125 ex Class H omt and.
10 ex below retainer and 103 ex aformation. Theversel out 12 squal pulled ttog.

The Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Co	Form approved.
Form 316025 UN .ED STATES SUBMIT IN TRIP). 4TE-	Budget Bureau No. 1004-0135 ' Expires August 31, 1985
PORRECTION DENARIPMENT OF THE INTERIOR verse side)	5. LEASE DESIGNATION AND BERIAL NO.
BUREAU OF LAND MANAGEMENT	LC-06/858
MAR 13 SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
(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.)	
APRICE	7. UNIT AGREEMENT NAME
OILANTS A. OFFICE WELL OTHER	
2. NAME OF OPERATOR	8. FARM OR LEASE NAME
amoco Production Company	Malco S Federal
3. ADDRESS OF OPERATOR	9. WELL NO.
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*	10. FIELD AND POOL, OB WILDCAT/
See also space 17 below.)	Chall Blill Walnut
At surface 1650 FNL X 1653 FWL	11. SEC., T., R., M., 02) BLK. AND
(Unit F, SE/4 NW/4)	SURVEY OR AREA
	11-18-27
14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.)  3587 ADB	12. COUNTY OR PARISH 13. STATE
	Eddy   NM
18. Check Appropriate Box To Indicate Nature of Notice, Report, or O	ther Data <sup>V</sup>
NOTICE OF INTENTION TO:	NT EMPORT 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 OD ACIDIZING	BANDONMENT*
(Other) CHANGE PLANS (Other) (Other) (Other)	of multiple completion on Well
17. DESCRIBE PROPUSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates	tion Report and Log form.)
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical nent to this work.)*	depths for all markers and zones perti-
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This is to inform you that production from pump	susung segunon
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Morrow to the work camp.	
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\*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, fittiffous or fraudifent statements or representations as to any matter within its jurisdiction.

Form 3160-5	<u>'</u> '	TED STATES	SUBMIT IN TR CA	Form approved Budget Bureau	No. 1004-0135
November 1983) Formerly 9-331)	DEPARTMEN	T OF THE INTERIO	TOTAL PARTIES	Expires Augus	
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OIL GAS WELL	OTHER		ARTESIA, OFFICE	UNIT AGREEMENT N	AME
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3. ADDRESS OF OPERATO	108 Hold	ly nm 88240	Artesia, NM 88210	9. WBLL NO.	acios_
See also space 17 bel	low.)	and in accordance with any St	tate requirements.*	10. FIELD AND POOL,	WILDCAT
At surface	1650 FNLX	1653 FWL		11. SBC., T., B., M. P.	Woycamp
	Cllnit F	SE/4 NW/4)		SURVEY OR AND	
14. PERMIT NO.	15.	ELEVATIONS (Show whether DF, R	T, GR, etc.)	11-18-27 12. COUNTY OR PARISE	
		3587 RDB		Eddy	nm
16.	Check Approp	riate Box To Indicate Na	ture of Notice, Report, o	or Other Data	
	NOTICE OF INTENTION T	o:	<b>S</b> ∪B.	SEQUENT REPORT OF:	
TEST WATER SHUT-C	[]	R ALTER CASING	WATER SHUT-OFF FRACTURE TREATMENT	BEPAIRING	<del></del>
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REPAIR WELL	CHANGI	C PLANS	(Other) Status	o Godate	
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18. I hereby certify that	the foregoing is true	And correct	Admin . Chaly	1 4 4-2	-85
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	eral or State office use)	ECORD	•		
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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.

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CASING RECORD (Report all atrings set in well)  CARING NIZE  WEIGHT, LB/FT.  DEPTH SET (MD)  11-3/4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"  17-4"	26. TYPE ELECTRIC A	OTHER LOGS	RUN	7 <del>5</del>				1 27.	WAS WELL CORED
CARING NIZE  WEIGHT, LB/FT.  DEPTH SET (ND)  HOLE SIZE  11-3/46  4-7#  4-7#  1000' 15"  970 SX  CIRC  LINKNOWN  5-1/21" 1 7#  CZT7-10,138  7/81"  855 SX  TUBING RECORD  LINER RECORD  81ZE  TOP (MD)  BOTTOM (MD)  BOTTOM (MD)  BOTTOM (MD)  BOTTOM (MD)  BOTTOM (MD)  SACKS CEMENT*  SCREEN (MD)  SIZE  DEPTH SET (MD)  PROPER SET (MD)  PROPER SET (MD)  PROPER SET (MD)  DEPTH INTERVAL (MD)  7382'-88'  AMOUNT AND KIND OF MATERIAL PSED  DEPTH INTERVAL (MD)  AMOUNT AND KIND OF MATERIAL PSED  DOG GAI 1570 NEFFE HCL  W/ Bqll Scalers and 1000 Gal  15.70 NEFFE HCL  WELL STATUS (Producing or Amount of Test person)  AMOUNT FOR LINE STATUS (Producing or Shall of Test person)  CHOKE SIZE  PROPIN FOR  TOP (MD)  PRODUCTION  PRODUCTION  PRODUCTION METHID (Floreing, gus fift, pumping—size and type of pump)  WELL STATUS (Producing or Shall of Test person)  CHOKE SIZE  PROPIN FOR  TEST PERSON  CHOKE SIZE  PROPIN FOR  TEST PERSON  CHOKE SIZE  PROPIN FOR  TEST PERSON  CHOKE SIZE  PROPIN FOR  TEST PERSON  CHOKE SIZE  PROPIN FOR  TEST PERSON  CHOKE SIZE  PROPIN FOR  TEST PERSON  CHOKE SIZE  PROPIN FOR  TEST PERSON  CHOKE SIZE  PROPIN FOR  TEST PERSON  CHOKE SIZE  TEST PERSON  CHOKE SIZE  PROPIN FOR  TEST PERSON  CAS—MEFF.  WATER—BBL.  UAS-OIL GRAVITY-API (CORR.)  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985  MAY 10 1985	<u>CBL</u>								Ma
11-3/4" 47# 1000' 15" 970 SX  8-5/8" 32# 6348' 11 " 300 SX  LINER RECORD  29. LINER RECORD  BIZE TOP (MD) BOTTON (MD) SACKS CEMENT* NURSEEN (MD) SIZE DEPTH SET (MD) PACKER SET (MD)  30. TUBING RECORD  BIZE TOP (MD) BOTTON (MD) SACKS CEMENT* NURSEEN (MD) SIZE DEPTH SET (MD) PACKER SET (MD)  7046-67, 7090-7100, 7382-88'  32. ACID. SHOT. FRACTURE, CEMENT SQUEEZE, ETC.  DEPTH INTERVAL (MD) AMOUNT AND KIND OF NATERIAL USED  W/ 4 DRISPF (.380")  13.*  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PROPINATION  PROPINATION  PROPINATION  CHOKE SIZE  PROPINATION  OLD HAIL.  GAS-MCC.  MAY 10 1985  MAY 10 1985  MAY 10 1985  LOSS MAILE 1-31-85  LOSS MAILE 1-31-85  LOSS MAILE 1-31-85  LOSS MAILE 1-31-85  LOSS MAILE 1-31-85  LOSS MAILE 1-31-85  ALCOR TUBING PRESS. CARNING PRESS. RATE CALCULATED OH RAIL.  LOSS MAILE 1-31-85  LOSS MAILE 1-31-85  LOSS MAILE 1-31-85  ALCOR TUBING PRESS. CARNING PRESS. RATE CALCULATED OH RAIL.  CALCULATED OH RAIL  LOSS MAILE 1-31-85  LOSS MAILE 1-31-85  ALCOR TUBING PRESS. CARNING PRESS. RATE CALCULATED OH RAIL.  CALCULATED OH RAIL  LOSS MAILE 1-31-85  LOSS MAILE 1-31-85  LOSS MAILE 1-31-85  ALCOR TUBING PRESS. CARNING PRESS. RATE CALCULATED OH RAIL  LOSS MAILE 1-31-85  ALCOR TUBING PRESS. CARNING PRESS. RATE CARNING PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RATE OF LAST PRESS. RA							•	· ·································	
1. THE CATT'- 10, 138 7 % 855 SX  1. THE CATT'- 10, 138 7 % 855 SX  1. THENG RECORD  SIZE TOP (MD) BOTTOM (MD) (SACKS CEMENT* SCREEN (MD) SIZE DEPTH SET (MD) PACKER SET (MD)  1. PERPORATION RECORD (Interval, size and number)  7046-67, 7090-7100, 7382-88 / DEPTH INTERVAL (MD)  W/ 4 DRUSPF (.380")  ACID. SHOT. FRACTURE, CEMENT SQUEEZE, ETC.  DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED  DOO GAI 1570 NEFF HCL  W/ BRIL SCALETS and 1000 GAI  1570 NEFF HCL  W/ BRIL SCALETS and 1000 GAI  1570 NEFF HCL  W/ BRIL SCALETS and 1000 GAI  1570 NEFF HCL  W/ BRIL SCALETS and 1000 GAI  1570 NEFF HCL  W/ BRIL SCALETS AND 1000 GAI  1570 NEFF HCL  W/ BRIL SCALETS AND 1000 GAI  SHALL TATUB (Producing or shall in)  Shut-IN  CASS-MC CEMPT OR RECORD  MAY 10 1985  1011 CRAVITY-APT (CORR.)  MAY 10 1985  LIST OF ATTACHMENTS  MAY 10 1985  LIST OF ATTACHMENTS  MAY 10 1985  ALL MAY 10 1985  MAY 10 1985				<del></del>				RD	AMOUNT PULLED
S-1/2"  1 7# 6277-10,138 7 % 855 SX  INKNOWN 7165'  9. LINER RECORD  SIZE TOP (MD) BOTTOM (MD) SACKS FEMENT* SUBEEN (MD) SIZE DEPTH SET (MD) PACKER SET (MD)  11. PERFORATION RECORD (Interval, ARC and number)  7046-67, 7090-7100, 7382-88 / DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED  W/ 4 DRUSPE (.380")  100 Gal 15% NEFE HCL  W/ Ball Scalers and 1000 Gal  15% NEFE HCL  W/ Ball Scalers and 1000 Gal  15% NEFE HCL  W/ Ball Scalers and 1000 Gal  15% NEFE HCL  W/ Ball Scalers and 1000 Gal  15% NEFE HCL  W/ Ball Scalers and 1000 Gal  15% NEFE HCL  W/ Ball Scalers and 1000 Gal  15% NEFE HCL  W/ 2-7100 Shut-IN  Shut-IN  1-85 PAPPING  1-85 PAPPING  O CAN-MUP WATER-BILL CASSOLI RATIO  O COMPANDED TO RECORD  O CASSOLI RATIO  O COMPAND TO 1985  5. LIST OF ATTACHMENTS  LOSS Mailed 1-31-85  6. I byreby certify that the foregoing and attached information is complete and correct as determined from all available records		·							
SIZE TOP (MD) BOTTON (MD) SACKS CENENT* SCREEN (MD) SIZE DEPTH SET (MD) PACKER SET (MD)  11. PERPORATION RECURD (Intered, rice and number)  12. TOP (MD) BOTTON (MD) SACKS CENENT* SCREEN (MD) SIZE DEPTH SET (MD) PACKER SET (MD)  13. TOP (MD) PACKER SET (MD) SIZE DEPTH SET (MD) PACKER SET (MD)  14. DPJSPF (.380")  15. ACID. SHOT. FRACTURE. CEMENT SQUEEZE. ETC.  15. DPPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED  15. DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED  15. NO. CAL Gelled 15.70 NEFF HCL  15. W. Ball Scalers and 1000 Gal  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  15. NEFE HCL  1			·		11			<del></del> -	
SIZE TOP (MD) BOTTOM (MD) SACKS CEMENT* SCREEN (MD) SIZE DEPTH SET (MD) PACKER SET (MD)  1. PERFORATION RECURD (Interval, AIZE and number)  7046-67, 7090-7100, 7382-88  W/ 4 DRUSPF (.380")  1. PERFORATION RECURD (Interval, AIZE and number)  7382-89  TOPH INTERVAL (MD)  AMOUNT AND KIND OF MATERIAL USED  AMOUNT AND KIND OF MATERIAL USED  1. DOO GAI 15% NEFE HCL  W/ BRIL Scalers and 1000 GAI  15% NEFE HCL  W/ BRIL Scalers and 1000 GAI  15% NEFE HCL  2-ZU-85  TEST PERIOD  CHOKE SIZE PROPINS OIL—RBL. GAS—NUP. WATER—BBL. GAS—OIL RATIO  COM, TUBING PRESS. CASING PRESSURE CALCULATED  24-BOIR RATE  1. DISPOSITION OF GAS (Sold, used for fucl, vented, etc.)  MAY 10 1985  S. LIST OF ATTACHMENTS  LORS MAILL 1-31-85  6. I breeby certify that the foregoing and attached information is complete and correct as determined from all available records				_ <del>'''''</del>  _		اد دس			1105
TOUL - CZ', 7090 - 7100, 7382 - 88   W/ 4 DRUSPF (.380")  PRODUCTION  ATE FIRST PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PRODUCTION  PROPRIES  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR TEST PERIOD  OLL GRAVITY-API (CORR.)  PROPIN FOR			LINER RECO	RD		30.	TUBI	NG RECORD	<del></del>
TONG - GZ , 7090 - 7100, 7382 - 88  W/ 4 DRUSPF (.380")  DEPTH INTERVAL (MD)  7382'-88'  DEPTH INTERVAL (MD)  7382'-88'  DEPTH INTERVAL (MD)  7382'-88'  DEPTH INTERVAL (MD)  7382'-88'  DEPTH INTERVAL (MD)  7382'-88'  DEPTH INTERVAL (MD)  AMOUNT AND KIND OF MATERIAL USED  DOO GAI 1570 NEFE HCL  W/ Ball Scalers and 1000 GaI  15 70 NEFE HCL  W/ Ball Scalers and 1000 GaI  15 70 NEFE HCL  TEST PERIOD  DATE OF TEST  TEST PERIOD  DOI CHIND  TEST PERIOD  DOI CHIND  TEST PERIOD  DOI CHIND  TEST PERIOD  DOI CHIND  TEST PERIOD  DOI CHIND  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST PERIOD  TEST WITNESSED BY  MAY 10 1985  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO THE STAND NE 1. WEXTON  TO T	SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEME	ST* SCREEN (	(ID) SIZ	E DEPT	H SET (MD)	PACKER SET (MD)
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TRODUCTION  ATE FIRST PRODUCTION  ATE FIRST PRODUCTION  PRODUCTION METHOD (Flowing, gus lift, pumping—size and type of pump)  T-ZL-85  PRODUCTION  PRODUCTION METHOD (Flowing, gus lift, pumping—size and type of pump)  WELL STATUB (Producing or shut-in)  Shut-IN  Shut-IN  GAS—MUF. WATER—BILL. GAS—MUF. WATER—BILL. GAS—MUF. WATER—BILL. GAS—OIL RATIO  LOW. TUBING PRESS. CASING PRESSURE CALCULATED DIL BILL.  4. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  MAY 10 1985  LOSS MAILE 1-31-85  6. 1 Direby certify that the foregoing and attached information is complete and correct as determined from all available records	W/ II No.	co- (30	ν") <sup>′</sup>		7382	- 88'	-l		
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2-76-85  PATE OF TEST HOURS TESTED CHOKE SIZE PROD'N. FOR TEST PERIOD OIL—HBL.  3-18-85  CASING PRESSURE: CALCULATED OIL—HBL.  LOW. TUBINO PRESS.  CASING PRESSURE: CALCULATED OIL—HBL.  4. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  MAY 10 1985  MAY 10 1985  LOGS Mailed 1-31-85  6. I byreby certify that the foregoing and attached information is complete and correct as determined from all available records		N PROI	OUCTION METHOD	(Flowing, gus li	ft, pumping—scr	and tune of -	ump)		
3-18-85 74  TEST PERIOD  O CASCULATED  24-HOLR RATE  OIL BILL.  OAS-MCACEPPO FOR RECORD  OIL GRAVITY-API (CORR.)  14. DISPOSITION OF GAS (Sold, used for fuel, venied, etc.)  MAY 10 1985  15. LIST OF ATTACHMENTS  LOGS Mailed 1-31-85  16. I bereby certify that the foregoing and attached information is complete and correct as determined from all available records	2-26-85		Pumpi	na		ppc 0) p	u.n.p)	shut-in)	· - ·
3-18-85 Z4  PLOW. TUBING PRESS. CANING PRESNURE CALCULATED DIE BILL.  34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  MAY 10 1985  15. LIST OF ATTACHMENTS  LOGS Mailed 1-31-85  16. I bereby certify that the foregoing and attached information is complete and correct as determined from all available records	TEST TO STA	HOURS TESTED	CHOKE SI	PROD'N. FO	OR OIL-HBL.	GAS	MCF. W.		
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)  MAY 10 1985  15. LIST OF ATTACHNENTS  LOGS Mailed 1-31-85  16. I bereby certify that the foregoing and attached information is complete and correct as determined from all available records		74		i EST FERT	0	4	. 1		0
15. LIST OF ATTACHMENTS  LOGS Mailed 1-31-85  16. I bereby certify that the foregoing and attached information is complete and correct as determined from all available records	LOW. TUBING PRESS.	CASING PRESSU		D DIE BBI.	IAS-	WC VECTO	WATER-REL	OIL	GRAVITY-API (CORR.)
5. LIST OF ATTACHMENTS  LOGS Mailed 1-31-85  6. I byreby certify that the foregoing and attached information is complete and correct as determined from all available records	4. DISPOSITION OF ST	Cold want to	r fuel nented	-			Lux		
LOGS Maiked 1-31-85  16. I bereby certify that the foregoing and attached information is complete and correct as determined from all available records	wordstrus of GA.	s (Doia, usea fo	r jues, vented, el	c.)		M	AV 10 10	WITNESSED	нү
LOGS Mailed 1-31-85  16. I bereby certify that the foregoing and attached information is complete and correct as determined from all available records	5. LIST OF ATTACHM	ENTS					MI 10 19	0 <b>J</b>	
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$\mathcal{M} \setminus \mathcal{K}$	36. I bereby certify t	hat the foregoi	ng and attached	information is	complete and cor.	ect as determi	AD, NL !.	vailable record	ls —
TITLE HOMINISTRATIVE HOOLS DATE 6 MAY 1985	81CVED 1/	1 XJ.	_		Almost 1	, A I	J.		
	SIGNED	wh. Malor		TITLE	Maministrati	ve Hoolys	1	DATE 6	MAY 1985

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

Fitle 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.

A+C RIM-C . 1-TPR , 1-FTN, 1-NIG

<b>,</b>	TOP	TRUE VERT, DEPTH		• ÷
GEOLOGIC MARKERS	T	MEAS, DEPTH	·	
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thereof, cor wing and sl	CONTENTS,			
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drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):	FORMATION			

November 1933) Comperly 9–331)  DEPARTME OF THEAINTERIOR verse side  BUREAU OF LAND MANAGEMENT	Budget Bureau No. 1004-0135 Expires August 31, 1985  5. LEASE DESIGNATION AND SERIAL NO.
SUNDRY NOTICES AND REPORTS ON WELLS  (Do not use this form for proposals to drill or to sepen or plus back to a different pervoir.  Use "APPLICATION FOR PERM T—" for the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the proposals of the propos	0. IF INDIAN, ALLUTTEE OR TRIBE NAME
OIL GAB WELL OTHER DXA MAR 17 1986	7. UNIT AGREEMENT NAME  8. FARM OR LEASE NAME
AMOCO PRODUCTION COMPANY  O. C. DC  3. ADDRESS OF OPERATOR  P.O. BOX 68 HOBBS, NEW MEXICO SOZ4U  4. Docation of Well (Report location clearly and in accordance with any State requirements)  Secretary of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the property of the	Malco "5" Federal 9. WALL NO.
See also space 17 below.) At surface  1650 ' FML × 1653 ' FWL	10. FIELD AND POOL, OR VILDCAT  AND DESCRIPTION OF THE SURFACE AND SURVEY OF AREA  SURVEY OF AREA  SURVEY OF AREA
(UNIT F, SE/4, NW/4)  14. PERMIT NO.  16. ELEVATIONS (Show whether DF, ST, CR, etc.)  300/5205/0  3587/6/6	12. COUNTY CA TABLE 13. STATE AM
16. Check Appropriate Box To Indicate Nature of Notice, Report, or O	shor Des
	ENT REPORT OF:
TEST WATER SHUT-OFF PULL OR ALTER CASING WATER SHUT-OFF FRACTURE TREAT MULTIPLE COMPLETE FRACTURE TREATMENT SHOOT OE ACIDIZE ABANDON* SHOOTING OR ACIDIZING REPAIR WELL CHANGE PLANS (Other)	BEPAIRING WELL  ALTERING CABING  ABANDONMENT®
(Other) (Note: Report results of Completion or Recomple	of multiple completion on Well tion Report and Log form.)
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, i proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical nent to this work.)	
1. MISU 11-25-85 and DHarth rods, pump, and taking.	
2. lan CIBP and set at 6995!	
3. Kan free point log.	10 1
4. LIHa/tubing to 6950' and pumped 80BBha brine gel. Capped C.	TOPWITH 15 SX Class Heement.
5. Displaced holowith 150 BBL brine gel 6. Spotted 405x class theement from 6400-6225! WOC.	Taged agent + +17111
1. Pulled tuking to 5350' and pumped 26 sx class Come	
8. Perforated 1049-50'W/4DPJSPF. Established circulation	out 11 3/4" casing.
9. Set Cement retainer at 950'. Spaceged a/3505x class C Ceme	of. Circulated 175xout 1/3/40
Cheng.	
0 + 5 BLM- (), 1 - JRB, 1 -/FJN, 1- CMH  16. 1 hereby certify, that the foregoing is true and correct	
SIGNED HARLE M. HERRY TITLE Administrative Analyst (S	G) DATE 12/5/85
(This space ton Federalior State office use)	3-14-59
APPROVED BY TITLE TITLE	Post FD-2
*See Instructions on Reverse Side	3-21-86 P4A

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.

10. Spotted 105x class Coment 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 W.	Mano.
DATE WELL DISCONNECTED: 12/15/86	·
GCNM'S STATION NUMBER: 1890-00	

RECEIVED BY

JAN - 5 1987

O. C. D.

ARTRIELS OFFICE

GAS COMPANY OF NEW MEXICO TRANSPORTER

GAS CONTROL SUPERVISOR

cc: Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87501

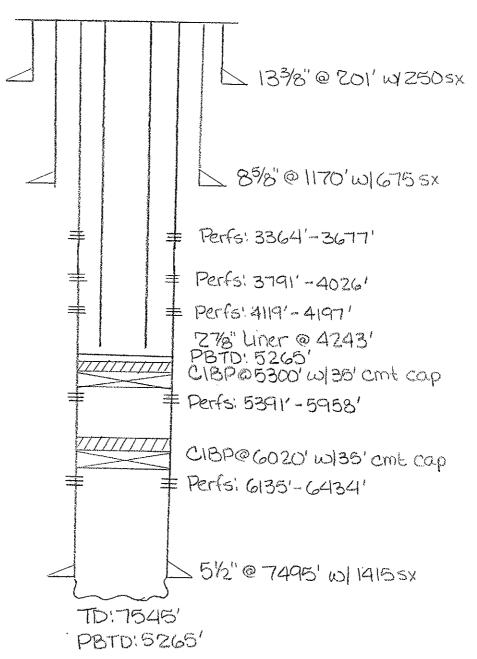
> Tom Sanders - Albuquerque Carolyn Titus - Albuquerque Merle Dennis - Kutz Canyon Oil Conservation file Grady Gist file



# NAVAJO REFINING COMPANY Map ID No. (分う Artificial Penetration Review

OPERATOR Mack Energy Corp	STATUS_ Active Oil
LEASE State H	LOCATION Sec. 2 -T18S-R27E
WELL NUMBER 2	MUD FILLED BOREHOLE NA
DRILLED 10-31-07	TOP OF INJECTION ZONE ~7215
PLUGGED NA	API NO. <u>30-015- 35원/4</u>

REMARKS: Calc. Top of Cement behind 51/2"@Surface.



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

### State of New Mexico

Form C-101 Permit 60506

## **Energy, Minerals and Natural Resources**

# Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

APPLICATION FOR	DEDMIT TO DOLL I	DE ENTED	DEEDEN	DILICPACE	OD ADD A ZONE
APPLICATION FOR	PERMIT TO DRILL	. RE-ENIER	. DEEPEN.	PLUGDAUK.	OR ADD A ZONE

AFFICATIONTOR	APPLICATION FOR PERMIT TO DRIBE, RE-EVIER, DEEPEN, PEUGBACK, OR ADD A ZONE						
1.	Operator Name and Address	2. OGRID Number					
Iv.	13837						
	3. API Number						
	ARTESIA , NM 88211	30-015-35814					
4. Property Code	5. Property Name	6. Well No.					
303847	002						

#### 7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
Н	2	18S	27E	Н	2063	N	441	E	EDDY

### 8. Pool Information

CHALK BLUFF; WOLFCAMP GAS 96963

### Additional Well Information

9	100		Zumania wen	IIIIOI IIII IIII		01	
9. Work Type New Well	10. Well Туре OIL		11. Cable/Rotary	able/Rotary 12. Lease Type State		13. Ground Level Elevation 3590	
14. Multiple N	15. Prop	osed Depth	16. Formation Wolfcamp	8	17. Contractor	18. Spud Date 9/20/2007	
Depth to Groun	Depth to Ground water 50		Distance from nearest fresh water well			Distance to nearest surface water	
Pit: Liner: Synthetic Closed Loop Syst	tem 🛮	mils thick	Clay Pit Volume:		ing Method: h Water Brine 1	Diesel/Oil-based Gas/Air	

19. Proposed Casing and Cement Program

Туре	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

Туре	Working Pressure	Test Pressure	Manufacturer					
DoubleRam	2000	2000						

of my knowledge and belief.	ation given above is true and complete to the best. Ding pit will be constructed according to	OIL CONSERVATION DIVISION  Approved By: Bryan Arrant			
NMOCD guidelines, a ge OCD-approved plan	neral permit , or an (attached) alternative				
Printed Name: Electronic	ally filed by Jerry Sherrell	Title: Geologist			
Title: Production Clerk		Approved Date: 9/19/2007	Expiration Date: 9/19/2008		
Email Address: jerrys@r	nackenergycorp.com	vid video	-0.20		
Date: 9/11/2007	Phone: 505-748-1288	Conditions of Approval Attached			

Form C-102 Permit 60506

District I

1625 N. French Dr., Hobbs, NM 88240 Phone:(505) 393-6161 Fax:(505) 393-0720

<u>District I</u>

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

<u>District III</u>

1000 Rio Brazos Rd., Aziec, 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

#### 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. Propert	y Name 6. Well No.			
303847	STAT	EH 002			
7. OGRID No.	8. Operato	or Name 9. Elevation			
13837	MACK ENER	RGY CORP 3590			

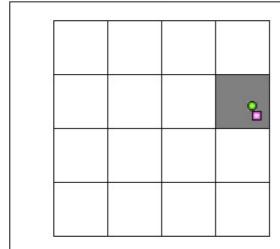
#### 10. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
Н	2	18S	27E		2063	N	441	E	EDDY

#### 11. Rottom Hole Location If Different From Surface

			· Downin		ocamon ii Di	IICICIIC I IC	mi same		
UL - Lot	Section	Township	Range	Lot Idr	Feet From	N/S Line	Feet From	E/W Line	County
H	2	18S	27E	Н	2300	N	340	E	EDDY
	cated 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



#### 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

Well: STATE H #002 API: 30-015-35814

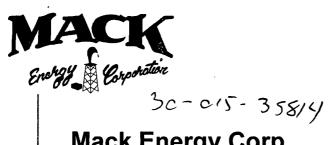
Created By	Comment	Comment Date
LDWSHERRELL	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	9/11/2007

# 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 wfresh water mud.
BArrant	Cement to cover all oil, gas and water bearing zones.



# Mack Energy Corp.

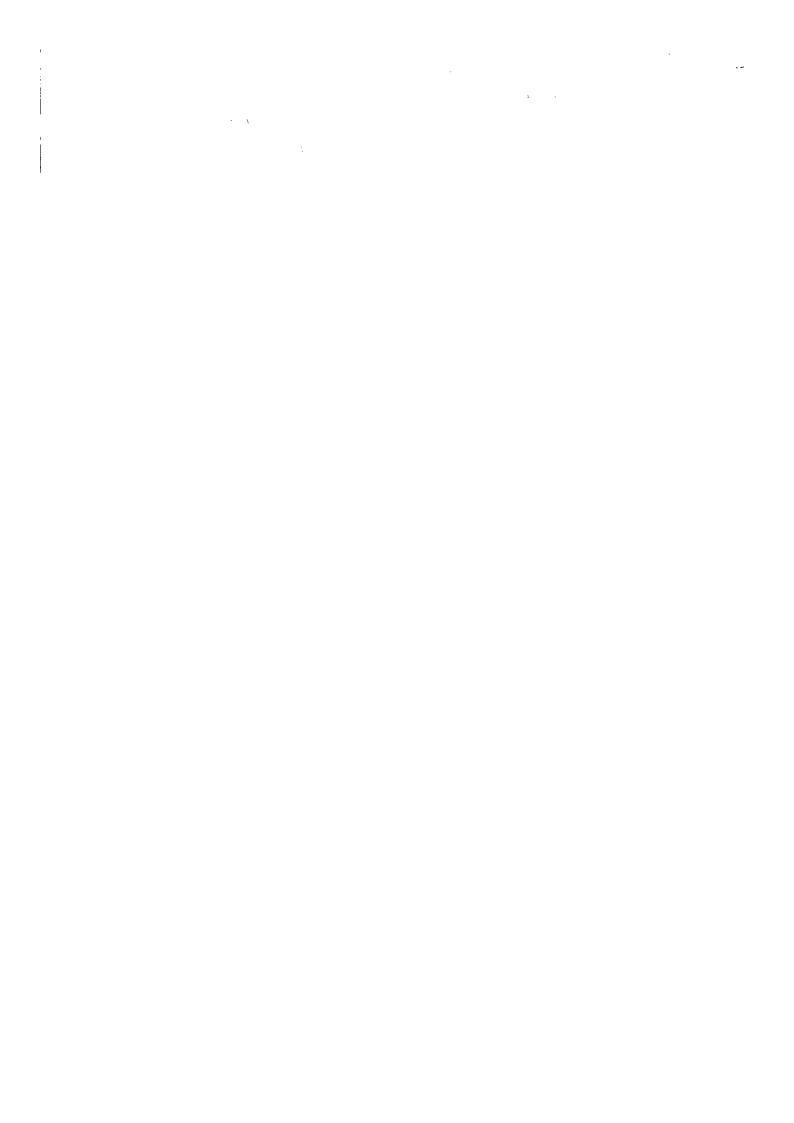
Eddy County, NM (NAD 27 NME) State H #2 State H #2 Wellbore #1

Plan: Plan #1

# **Standard Planning Report**

11 September, 2007







### **Scientific Drilling**

Planning Report



0.05 °

atabase: EDM 2003.16 Single User Db

Company: Mack Energy Corp.
Project: Eddy County, NM (NAD 27 NME)

Site: State H.#2 Well: State H.#2 Wellbore: Wellbore #1 Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well State H #2 WELL @ 3606.00ft (KB Elev)

WELL @ 3606.00ff (KB Elev)

Grid Minimum Curvature

Project Eddy County, NM (NAD 27 NME)

Map System: Geo Datum: US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS)

0.00 ft

Slot Radius:

NAD 1927 (NADCON CONUS) New Mexico East 3001

Map Zone:

Position Uncertainty:

System Datum:

Mean Sea Level

Grid Convergence:

 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

Well State H #2 Well Position 0 00 ft 646,629 20 ft 32° 46′ 39.510 N +N/-S Northing: Latitude: 0 00 ft 528,184 50 ft 104° 14' 29.874 W +E/-W Easting: Longitude: Position Uncertainty 0.00 ft Wellhead Elevation: 3,606.00 ft Ground Level: 0 00 ft

18 2 / 2 1 F 13 19 Design Plan #1 Audit Notes: Version: PLAN Tie On Depth: 0.00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) .se. (ft) ..... (ft) ... (°) 0.00 0.00 0.00 156.92

Plan Sections		53. 1 P (1) 12	· [10] 表现的。	Mary Andr	1				AND THE PROPERTY.	ESTABLE RESIDENCE
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### **Scientific Drilling** Planning Report



Database: EDM 2003 16 Single User Db Local Co-ordinate Reference.
Company: Mack Energy Corp. TVD Reference:
Project: Eddy County, NM (NAD 27, NME) MD Reference:
Site: State H #2 North Reference:
Well: State H #2 Survey Calculation Method:
Wellbore: Wellbore: #1
Design: Plan #1

Local Co-ordinate Reference TVD Reference MD Reference North Reference;

Well State H #2
WELL @ 3606.00ti (KB/Elev)
WELL @ 3606.00ti (KB/Elev)
Grid
Minimum Curvature

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Well:

Wellbore: Design:

# **Scientific Drilling**

Planning Report



Database: EDM, 2003:16 Single User Db Company: Project: Site: Mack Energy Corp.

Eddy County, NM (NAD 27 NME) State H,#2 State H #2

Wellbore #1. Plan #1

Local Co-ordinate Reference:

TVD Reference: North Reference: Survey Calculation Method: Well State H #2 WELL @ 3606.00ft (KB Elev) WELL @ 3606 OOR (KB Elev) Grid Minimum Curvature

Planned Survey	F. 6. 6. 9 C.	and the second	Jan 2 2 23			TANGT YAR	VAN SANGAR	1000	Property Market
						77			Markey Park
Measured			Vertical **		facility in the same	Vertical	Dogleg	Build	Turn
Depth 3	Inclination	Azimuth	Depth	+N/-S	+E/-W:3	Section - 5	Rate	∼ Rate 🦠 🤼	Rate
	(°)	\$\frac{\cdot\}{\cdot\}\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/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
7,300 00	0.00 0.00	0.00 0.00	7,286.70 7,300.00	-237 00 -237.00	101.00 101.00	257.62 257 62	0 00 0.00	0.00	0.00 0.00

Target Name htt/miss target Dip	A	) Dir.	TVD (ft)	Carrier Park	+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 - Rectangle (sides W0.00			7,300.00 .00 TVD, -23	-247.00 7 00 N, 101.00	111 00 (E)	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 - Rectangle (sides W800.0			7,300.00 .00 TVD, -23	-247.00 7.00 N, 101 00	111 00 (E)	646,382 20	528,295.50	32° 46' 37.065 N	104° 14' 28.576 W





# Scientific Drilling

Planning Report



Plan Annotations  Measured Depth ((1)	Vertical Depth	Local Coordin	nates +E/-W	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°

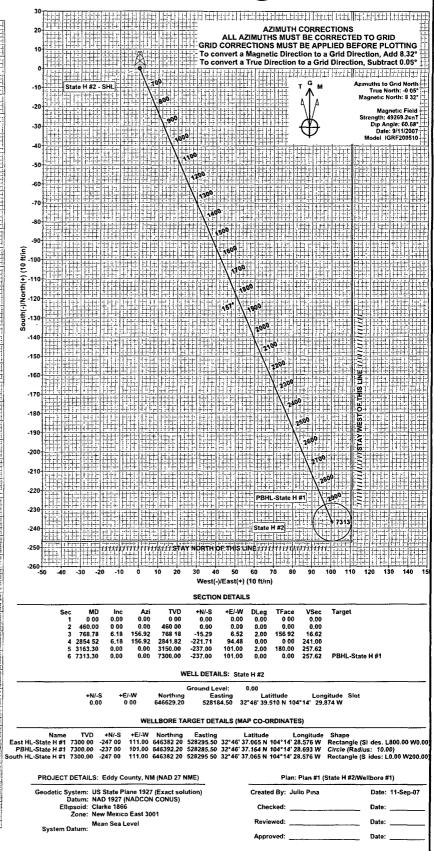


Vertical Section at 156.92° (200 ft/in)

Scientific Drilling for Mack Energy Corp. Site: Eddy County, NM (NAD 27 NME) Well: State H #2

Well: State H #2 Vellbore: Wellbore #1 Design: Plan #1







Subtitit 3 Copies To Appropriate District Office	State of New Mexico	Form C-103			
District I 1625 N French Dr., Hobbs, NM 88240	Energy, Minerals and Natural Resources	May 27, 2004 WELL API NO.			
District 11	OIL CONSERVATION DIVISION	30-015-35814			
1301 W Grand Ave, Artesia, NM 88210 <u>District III</u>	1220 South St. Francis Dr.	5. Indicate Type of Lease STATE  FEE			
1000 Rio Brazos Rd , Aztec, NM 87410 District IV	Santa Fe, NM 87505	6. State Oil & Gas Lease No.			
1220 S St Francis Dr, Santa Fe, NM 87505		B-9391			
SUNDRY NO	TICES AND REPORTS ON WELLS	7. Lease Name or Unit Agreement Name			
DIFFERENT RESERVOIR USE "APPL	OSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A ICATION FOR PERMIT" (FORM C-101) FOR SUCH	State H			
PROPOSALS)  1. Type of Well: Oil Well	Gas Well 🛛 Other	8. Well Number 2			
2. Name of Operator		9. OGRID Number			
	ergy Corporation	013837			
3 Address of Operator	x 960 Artesia, NM 88211-0960	Chalk Bluff Wolfcamp			
4 Well Location	A 700 Micsia, 1414 00211-0700	Chair Dian Woncamp			
Unit Letter H	feet from theNorth line and	441 feet from the East linc			
Section2	Township 18S Range 27E	NMPM County Eddy			
	11. Elevation (Show whether DR, RKB, RT, GR, etc.	c.) (1) (1) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4			
Pit or Below-grade Tank Application	or Closure				
	vaterDistance from nearest fresh water wellD	vistance from nearest surface water			
Pit Liner Thickness: mi		Construction Material			
12. Check	Appropriate Box to Indicate Nature of Notice	e. Report or Other Data			
	<u>.</u>	-			
NOTICE OF II PERFORM REMEDIAL WORK	_	BSEQUENT REPORT OF: DRK ☐ ALTERING CASING ☐			
TEMPORARILY ABANDON	<del>-</del>	RILLING OPNS. P AND A			
PULL OR ALTER CASING	- MULTIPLE COMPL				
OTHER: Change casing	_				
	pleted operations. (Clearly state all pertinent details, a	and give pertinent dates, including estimated date			
	work). SEE RULE 1103. For Multiple Completions: A				
Mack Energy would like to chang	ge the casing string approved on this APD.				
D 11 17 1 (0H1 1 : 000) 1	2.2/01/40//77 40				
	3 3/8" 48# H-40 casing and cement. 8 5/8" 24# J-55 casing and cement.				
	ely 7300', run 5 1/2" 17# L-80 casing and cement.				
F1	, , , , , , , , , , , , , , , , , , , ,	OCT 22 2007			
		OCD-ARTESIA			
		oob /iiii Loi/i			
I havely cortify that the information	chave is two and complete to the heat of well-would	and belief to other order days to the			
grade tank has been/will-be constructed of	above is true and complete to the best of my knowledge or closed according to NMOCD guidelines, a general permit	or an (attached) alternative OCD-approved plan			
SIGNATURE Jernylu	Sheyelf TITLE Production Clerk	DATE 10/19/07			
Type or print name Jerry W. Sher	rell E-mail address: jerrys@mack	xenergycorp.com Telephone No (505)748-1288			
For State Use Only		OCT 2 2 2007			
	IN G. ARRANT				
APPROVED BY: <b>DIST</b> Conditions of Approval (If any):	RICT II GEOLOGISTITLE	DATE			



# 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**

Planning Report



Database: EDM 2003 16 Single User Db

Company: Mack Energy Corp Project:

Map Zone:

Eddy County, NM (NAD 27 NME)

State H #2 Site: Well: State H #2 Wellbore #1 Wellbore Design: Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well State H #2

WELL @ 3606 00ft (KB Elev) WELL @ 3606 00ft (KB Elev)

Grid

Mınimum Curvature

1			A transport of the Charles of the same of the	to the text of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the co	and the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second o
Project	Eddy County, N	NM (NAD 27 NME)			
		and the same same and and an area of the same of			and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s

US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS) Map System: Geo Datum:

New Mexico East 3001

System Datum:

Mean Sea Level

State H #2 Site Northing: 646,629 20ft 32° 46' 39 510 N Site Position: Latitude: Easting: 528,184 50ft 104° 14' 29 874 W From Мар Longitude: 0 05 ° Position Uncertainty: 0 00 ft Slot Radius: Grid Convergence:

Well State H #2 Well Position +N/-S 0 00 ft Northing: 646,629 20 ft 32° 46' 39 510 N Latitude: +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 0 00 ft Ground Level:

Wellbore Wellbore #1 Magnetics Model Name Field Strength Sample Date Declination Dip Angle (°) (°) (nT) IGRF200510 10/19/2007 8 36 60 68 49,259

Plan #2 Design Audit Notes: Version: Phase: PLAN Tie On Depth: 0 00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0 00 0 00 156 92

Measured			Vertical			Dogleg	Build	Turn		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Rate	Rate	Rate	TFO	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	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



## **Scientific Drilling**

Planning Report



Database:

EDM 2003 16 Single User Db

Mack Energy Corp Eddy County, NM (NAD 27 NME) Company:

Project: Site:

State H #2 Well: State H #2 Wellbore #1 Plan #2 Wellbore: Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well State H #2

, WELL @ 3606.00ft (KB Elev) WELL @ 3606 00ft (KB Elev)

Minimum Curvature

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/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" Casin	g			2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					
1,250 00	0 00	0.00	1,250 00	0 00	0.00	0 00	0 00	0 00	0 00
KOP 1250' S	tart 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

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	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 1 - Rectangle (sides		,	7,300 00 0.00 TVD, -2	-247 00 37 00 N, 101.0	111 00 00 E)	646,382 20	528,295 50	32° 46' 37 065 N	104° 14' 28 576 W
East HL-State H #1 - plan misses by 1 - Rectangle (sides			7,300 00 0 00 TVD, -2:	-247 00 37.00 N, 101.0	111 00 00 E)	646,382.20	528,295 50	32° 46′ 37 065 N	104° 14' 28.576 W



Design:

## **Scientific Drilling**

### Planning Report



EDM 2003.16 Single User Db Database:

Mack Energy Corp Eddy County, NM (NAD 27 NME) State H #2 Company: Project:

Site: Well: State H #2 Wellbore #1 Plan #2 Wellbore:

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference: MD Reference:

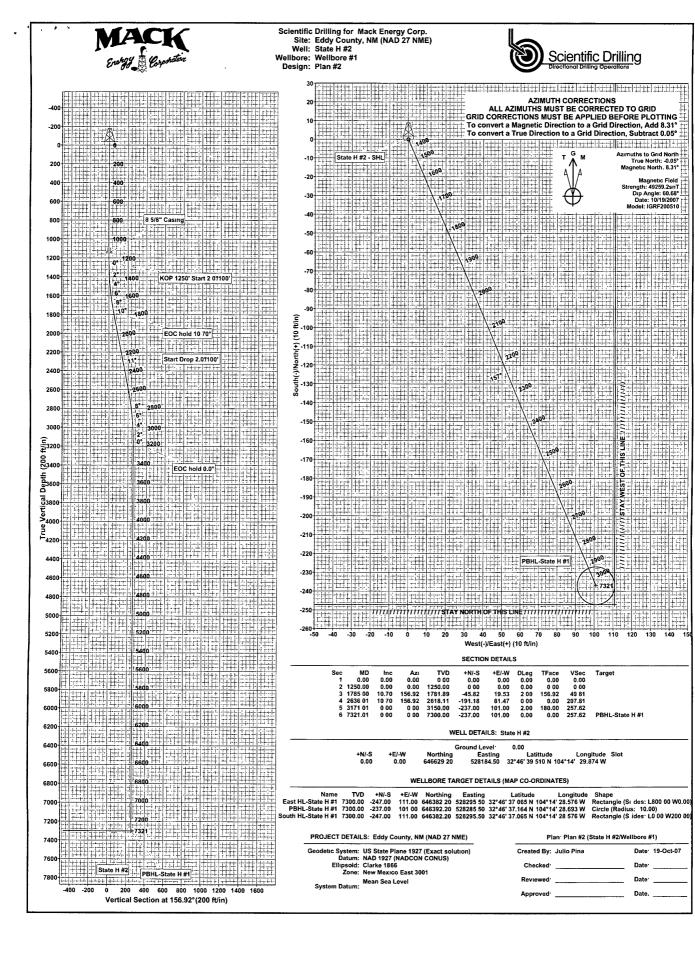
North Reference:

Well State H #2 WELL @ 3606 00ft (KB Elev) WELL @ 3606 00ft (KB Elev) Grid

Mınımum Curvature

Casing Points	'			and the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second o			
	Measured Depth	Vertical Depth			Casing Diamete	Hole r Diameter	
	(ft)	(ft)		Name	(ft)	(ft)	
	1,150 00	1,150 00	8 5/8" Casing		8 625	00 12.2500	0

Plan Annotation	ons	at and a to thought any materials			the same desired above the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control o	
	Measured	Vertical	Local Coor	dinates		
	Depth	Depth	+N/-S	+E/-W		
	(ft)	(ft)	(ft)	(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°	



#### District I State of New Mexico Form C-103 1625 N. French Dr., Hobbs, NM 88240 Permit 65781 Energy, Minerals and Natural Resources Phone:(505) 393-6161 Fax:(505) 393-0720 WELL API NUMBER District II Oil Conservation Division 1301 W. Grand Ave., Artesia, NM 88210 30-015-35814 Phone:(505) 748-1283 Fax:(505) 748-9720 1220 S. St Francis Dr. **Santa Fe, NM 87505** 5. Indicate Type of Lease 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170 S District IV 1220 S. St. Francis Dr., Santa Fe, NIM 87505 6. State Oil & Gas Lease No. Phone:(505) 476-3470 Fax:(505) 476-3462 SUNDRY NOTICES AND REPORTS ON WELLS 7. Lease Name or Unit Agreement Name (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO STATEH A DIFFRENT RESERVIOR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH 8 Well Number PROPOSALS.) 002 Type of Well: ○ 2. Name of Operator 9. OGRID Number MACK ENERGY CORP 13837 10. Pool name or Wildcat 3. Address of Operator PO BOX 960, , 11352 LOVINGTON HWY ARTESIA, NM 88211 4 Well Location 2063 N feet from the line and line 27E 18S NMPM Eddy County Township Range Section 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: 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 | MULTIPLE COMPL PULL OR ALTER CASING CASING/CEMENT JOB Other: Other: Drilling/Cement 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. 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 Ib/ft	Grade	TOC	Dpth Set	Sacks	Yield Class	1" Dpth	Pres Held		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	С		600	0	Y	
11/22/07	Prod	CutBrine	7.875	5.5	17	J-55	0	7495	1415	С		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: TITLE Geologist DATE 12/12/2007 7:46:02 AM Bryan Arrant

Subtitit 3 Copies To Appropriate District Form C-103 State of New Mexico Office May 27, 2004 Energy, Minerals and Natural Resources District I WELL API NO. 1625.N French Dr , Hobbs, NM 88240 30-015-35814 District 11 OIL CONSERVATION DIVISION 1301 W. Grand Ave , Artesia, NM 88210 5. Indicate Type of Lease 1220 South St. Francis Dr. District III STATE 🛛 FEE 1000 Rio Brazos Rd , Aztec, NM 87410 Santa Fe, NM 87505 6. State Oil & Gas Lease No. District IV 1220 S St Francis Dr , Santa Fe, NM SUNDRY NOTICES AND REPORTS ON WELLS 7. Lease Name or Unit Agreement Name (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 State H PROPOSALS) FFR 26 2008 8. Well Number 2 Gas Well Other 1. Type of Well: Oil Well 2. Name of Operator 9. OGRID Number 013837 Mack Energy Corporation 3. Address of Operator I 0. Pool name or Wildcat Red Lake; Glorieta-Yeso P. O. Box 960 Artesia, NM 88211-0960 4. Well Location \_feet from the line and feet from the Unit Letter line 18S 27E Eddy Section Township \_ Range NMPM County 11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3590' GR Pit or Below-grade Tank Application or Closure Denth Groundwater Distance from nearest fresh water well Distance from nearest surface water Pit Liner Thickness: Below-Grade Tank: Volume \_ \_ bb1s; 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 | COMMENCE DRILLING OPNS TEMPORARILY ABANDON [ CHANGE PLANS P AND A PULL OR ALTER CASING MULTIPLE COMPL CASING/CEMENT JOB OTHER: Completion 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. 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 belowgrade tank has been/will be constructed or closed according to NMOCD guidelines 🗔, a general permit 🗌 or an (attached) alternative OCD-approved plan 🔲 TITLE Production Clerk **SIGNATURE** 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

Conditions of Approval (if any):

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240

<u>District 11</u> 1301 W Grand Avenue, Artesia. NM 88210

State of New Mexico

Energy, Minerals & Natural Resource **FEB** 2 6 2008

Form C-104 Revised Feb. 26, 2007

OCD-ARTSISMIN to Appropriate District Office

1000 Rio Brazos	Rd, Az	tec, NM	87410			20 South St.		,	Opp				5	Copies
<u>District IV</u> 1220 S. St. Franc	eis Dr., :	Santa Fe.	NM 8750	)5	12	Santa Fe, Ni						AMEND	ED DE	грорт
					AIIC	OWABLE A		HOR	PIZATION	ј то т			IED KE	PORT
Operator n			ress				ND MOT		2 OGRID N		MILLO	IOKI		
•			Mack	Energy P.O. Bo	Corpora	ition				DILL C	013837		<del> </del>	
			Arte:		3x 960 88211-0	960			3 Reason fo	r Filing C	NW	ective Da	te	
4 API Numb	er			Name					-	6 P	ool Code			
30-015-3	5814				]	Red Lake; Glo	rieta-Yeso,	NE				<del>51120</del>	96	136
7 Property C 303	ode 847		s Prop	erty Nar	ne	State	H			9 W	/ell Num	ber 2		
H. Surfa		ocatio	)n											
UL or lot no	Section	on Tov	vnship	Range	Lot Idn	Feet from the	North/South	line	Feet from th	e East/	West line	J	County	
H	2		.88	27E		2063	North		441		East	Eddy		
****		Hole L				B 0 1	N. 110 1		D . C . U	East/	st/West line County			
UL or lot no.	Section	1	vnship	Range	Lot Idn	Feet from the			Feet from th	`	west inic	1	County	
H 12 Lse Code	∠ " Produ	18S		27E " Gas Conn	ection Date	2300 C-129 Perm	North		340 -129 Effective	East	17 C-	Eddy 129 Expir	ation D	ate
S S		P		1/1	1/08	0 120 7 0		16 C	-129 Effectiv	e Date	"	. <b>.</b>		
Ill. Oil a	nd G	as Trai	nsnort			I								
18 Transpoi	rter	45 1141	<u>isport</u>	<del>•15</del>		19 Transpor						<sup>20</sup> C	)/G/W	
OGRID		NT .	D C			and Ad	dress							
015694	Navajo PO Bo:		ıng									0		
				38211-0	159									
036785	. ]	DCP M	lidstre:	am LP									 G	
030783	' '	4001 P											0	
		Odessa	TX 7	79762									14	
										<u></u>				
	· .													
<u>k</u>														
IV. Well	Cam	1 4 !	D.4.											
21 Spud Da		22	Ready	Date	1	<sup>23</sup> TD	<sup>24</sup> PBTE		<sup>25</sup> Perfo	rations	T	<sup>26</sup> DHC	, MC	
10/31/20	1	1	1/23/2	007		7545'	5265'		4118.5				,	
27 HC	ole Size			28 Casing	g & Tubir	ng Size	<sup>29</sup> De	Depth Set 10 Sacks Cement					nt	
1.7	7 1/2				13 3/8		2	01				250		
	/ 1/2				13 3/6			.01		<u></u>		230		
12	2 1/4				8 5/8		1	170				675		
7	7/8				5 1/2		7	195				1415		
2.7/0							4'	243						
V. Well Test Data							4.	243						
V. Well Test Data  Ji Date New Oil   32 Gas Delivery Date   33 Test Date						rest Date	34 Test	Lengt	th 15	Tbg. Pre	ssure	<sup>36</sup> Cse	. Pressi	ure
1/14/2008 1/14/2008 1/30/08						/30/08	24 h	oure				552	,	
37 Choke S			38 Oil			Water	40 (			41 Test Me			st Metho	od
8 30 30								P						
42 I hereby cer	tify tha	it the ru		e Oil Con	servation	Division have		_	OIL CON <b>\$</b> I	RVATIO	N DIVISIO	ON		-
been complied	l with a	ind that	the info	rmation g	given abov				,					
complete to the Signature:		/		•	nei 1	No	Approved=by:		· //	111	20 /	, 1		
(		ny	<u> N</u>		Renal	IK T		XZ	moerl	44	1.W	rilso	2	

Approval Date:

Title: Production Clerk

Printed name: Jerry W. Sherrell

E-mail Address: jerrys@mackenergycorp.com

Date: 2/25/08

Phone: (575)748-1288

### State of New Mexico Energy, Minerals and Natural Resources Department

Form C-105

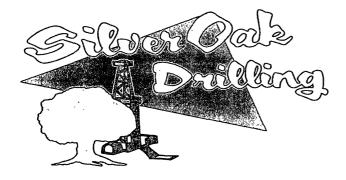
OIL CONSERVATION DIVISION
2040 South Pacheco

Revised 1-l-89

WELL API NO

30-015-35814

DISTRICT II 811 South First, Arte:	sia, NM 8821	o	Santa F	e, New N	Mexic	o 8750	05		5 Indicate Ty		те 🛚	FEE
DISTRICT III 1000 Rio Brazos Rd ,	Aztec, NM 87	410							6 State Oil & C B-9391	as Lease No		
WELL	COMPLET	ION OR	RECOMPLE	TION REF	ORT	AND LO	)G				<b>**</b> **********************************	
1 Type of Well	_								7 Lease Nam			ame
OIL WELL	S GAS	WELL	DRY	OTHER					•			•
b Type of Completion NEW WORK WELL OVER				DIFF RESVR 01	HER				State H			
2 Name of Operator							000		8 Well No			
Mack Energy Corp	oration				FF!	B 262	Mno		2			
3 Address of Operato					<b>A</b> C	D-ART	ESI	24	9 Pool name	or Wildcat		
P.O. Box 960, Artes	sia, NM 882	211-0960	)		UU	10-10-80		:	Red Lake; C	lorieta-Yes	O, NE	<u> </u>
4. Well Location				,				· · · · · · · · · · · · · · · · · · ·			<del></del>	
Unit Letter	<u>H</u> :	2063	Feet From The	Nor	th	Line	and	441	Feet F	rom The	Ea	Line
Section	2		Township	18S	Range	:	27E	NI	мРМ	Eddy		County
10 Date Spudded	11 Date TE	Reached	12 Date Co	ompl (Ready 1	o Prod.)	13	3 Elevat	ions (DF	& RKB, RT, G	R, etc ) 1	4 Elev	Casınghead
10/31/2007	<del></del>	1/2007		1/11/08				35	90' GR			
15 Total Depth	16. I	lug Back	l l	17 If Multiple Cor Many Zones <sup>9</sup>	npl How			ntervals Orilled By	Rotary Too		Cable 7	Γools
7545'	) . C ()	52	<u></u>			•	<u> </u>			es		
19 Producing Interval(s 4118.5-4197'	s), or this com	pietion - 10	op, Bottom, Name	;						20 Was Direct	tional Su Yes	-
21 Type Electric and C	ther Logs Rur								22 Was W	ell Cored		
Gamma Ray, Neutro	_		g, Spectral Ga	mma Ray							lo	
23			CASING DI	COPD (I	Danan	t all st	rings (	sot in	woll)			
CASING SIZE	WEIG	HT LB./F	CASING RE	TH SET	•	OLE SIZI	~ 1		MENTING R	FCORD	4 1/	OUNT PULLED
13 3/8	WEIG	48		01	110	17 1/2		CE	250 sx		A.W.	None
8 5/8		32	1	170		12 1/4			None			
5 1/2		17	74	495		7 7/8			1415 sx	ζ		None
24	TOP	I	LINER RECO	T				25		BING REC		
SIZE	ТОР		ВОТТОМ	SACKS CE	MENT	SCR	EEN		2 7/8	DEPTH 4243		PACKER SET
				<u> </u>			-,		2 1/8	4243		
26 Perforation reco	ord (interva	l. size. aı	nd number)	l		27 A	CID. S	HOT.	FRACTURE	E. CEMEN	r. sou	JEEZE, ETC.
	-		@ 6020 w/35'	cmt cap			H INTE					ERIAL USED
			@ 5300' w/35'					- 1000	See C-103	for detail		
	4118	.5-4197',	.42, 40									
						<u> </u>						
Date First Production		D	d	PRODU						Wall Ctate	(Dua d	or Shut-in)
1/14/2008	,	Proc	duction Method (F		n, <i>pumpi</i> x2x20'		ına iype <sub>i</sub>	pump)		wen statt	.s ( <i>rroa</i> . Produ	· · ·
Date of Test	Hours Tes	ted	Choke Size	Prod'n Fo		Oil - Bbl		Gas - M	CF V	Water- Bbl	T	Gas - Oıl Ratio
1/30/08	24 1	ours	1	Test Perio		8		30	E	30		3750
Flow Tubing Press	Casing Pro		Calculated 24	Oıl - Bbl	L	Gas -	MCF		ater- Bbl.		ıty - API	I - (Corr.)
			Hour Rate	8		30		30				
29 Disposition of Gas (	Sold, used for	fuel, vented	d, etc)			•			Test W	tnessed By		
Sold										Rober	t C. Ch	ase
30 List Attachments												
Deviation Survey as 31. I hereby certify the		agtion -!	h - 1 1 - 1	C4l-!- C				41 1		1-1	C	
J. I hereby certify th	ine injorn	iation sno	wn on ooin side	s oj inis jorn	ı is irue	апа сот	piete to	ine bes	і ој ту кпош	eage and bel	ıej	
Signature der	uple	! J/		rinted ame	Jerry '	W. Sheri	rell	Title	Produc	tion Clerk	Date	e <u>2/25/08</u>



PO Box 1370 Artesia, NM 88211-1370 (505) 748-1288 FEB 2 6 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 }

Notary Public

The foregoing was acknowledged before me this 30<sup>th</sup> day of November, 2007.

OFFICIAL SEAL
REGINIA L. GARNER
NOTARY PUBLIC - STATE OF NEW MEXICO
My commission expires Qua. 30, 200

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	25 <del>4</del> 0.00	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

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FEB 2 6 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 /9th of Lecember, 2007.

Notary Signature
County of Midland
State of Texas

DEBORAH SUE BYNUM Notary Public, State of Texas My Commission Expires 5/9/08



# **Scientific Drilling International**

### **Survey Report**

Company: MACK ENERGY Field: Chalk Bluff Site: Eddy County, NM Field: Site: Well: State H #2

Date: 12/16/2007

Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:

Time: 18:34.47 Page: :: Site: Eddy County, NM, Grid North SITE 0.0

Well (0.00N,0.00E,156.92Azi)
Minimum Curvature **Db:** Sybase

Survey:

Wellpath: VH - Job #32K11071013

11/06/07 KSRG 0'-1143' Scientific Drilling Internatio Keeper;Keeper Gyro Company:

Start Date:

11/06/2007

Engineer: Tied-to:

Madrid w/P&M From Surface

Tool:

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	77.4
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	91.5
400.00	0.38	143.78	399.99	1.35	-0.36	2.58	0.30	2.61	98.0
500.00	0.26	212.14	499.99	1.80	-0.82	2.66	0.37	2.78	107.2
600.00	0.28	250.72	599.99	1.91	-1.10	2.30	0.18	2.55	115 4
700.00	0.44	271.18	699.99	1.74	-1.17	1.69	0.20	2.05	124.6
800.00	0.40	74.03	799.98	1.62	-1.06	1.64	0.83	1.96	122.9
900.00	1.01	96.02	899.98	2.09	-1.06	2.85	0.66	3.04	110.3
1000.00	0.95	87.15	999.96	2.81	-1.11	4.56	0.16	4.69	103.7
1100.00	0.56	76.15	1099.95	3.17	-0.95	5.86	0.41	5.94	99.2
1143.00	0.26	86.43	1142.95	3 24	-0.90	6 16	0.72	6.23	98.2



# **Scientific Drilling International**

## **Survey Report**

Company: MACK ENERGY
Field: Chalk Bluff
Site: Eddy County, NM
Well: State H #2

Wellpath: DH - Job #32D11071006

Time: 19:33:59 Page: Site: Eddy County, NM, Grid North

Date: 12/16/2007 T Co-ordinate(NE) Reference: Vertical (TVD) Reference: SITE 0.0 Section (VS) Reference:

Well (0.00N,0.00E,156.92Azi)
Minimum Curvature Db: Sybase

Start Date:

Survey Calculation Method:

Survey:

11/05/07-11/14/07 MWD 1206'-7367' Scientific Pulling Internatio Company:

11/05/2007

Engineer: Tied-to:

Hernandez/Biggs/Elger From: Definitive Path

Tool:

MWD;MWD

|--|

MD ft	Incl deg	Azim deg	TVD ft -	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	CIsA 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	147.1
1682.00	8.51	155.25	1680.11	39.18	-34.17	19.74	1.38	39.46	149.9
1778.00	9 94	158.14	1774.87	54.56	-48.32	25 80	1.57	54.77	151.9
1873.00	9 56	157.67	1868.50	70.65	-63.22	31.85	0.41	70.79	153.2
1968.00	10.53	159.64	1962.04	87.21	-78.66	37.86	1.08	87.30	154.3
2064.00	9 83	160.07	2056.53	104.15	-94.59	43.71	0.73	104.20	155.2
2159.00	9.69	160.58	2150.15	120.23	-109.75	49.13	0.17	120.25	155.8
2255.00	10 79	160.25	2244.62	137.26	-125.83	54.86	1.15	137.27	156.4
2350.00	10.78	156.23	2337.95	155.02	-142.33	61.44	0.79	155.02	156.6
2445.00	10.67	156.45	2431.29	172.70	-158.52	68.54	0.12	172.70	156.6
05:000	46 = 1	4	050 / 00	400.40				400.40	450 -
2540.00	10.54	155.44	2524.66	190.18	-174.49	75.66	0.24	190.18	156.5
2604.00	10.43	156.37	2587.60	201.82	-185.12	80.42	0.32	201.83	156.5
2699.00	8.58	156.51	2681.29	217.51	-199.50	86.69	1.95	217.52	156.5
2794.00	7.39	158.65	2775.36	230.71	-211.69	91.74	1.29	230.71	156.5
2889.00	5.58	158.12	2869.75	241 43	-221.66	95.68	1.91	241.43	156.6
2984.00	4.30	167.04	2964.40	249.55	-229.42	98.20	1.57	249.55	156.8
3080.00	2.86	157 16	3060.21	255.49	-235.14	99.94	1.63	255.49	156.9
3175.00	1.50	150.04	3155.14	259.10	-238.40	101.48	1.46	259.10	156.9
3270.00	0.67	256.00	3250 13	260.24	-239.61	101.56	1.90	260.24	157.0
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	157.4
3556.00	0.51	181.08	3536.11	260 56	-240.73	99.73	0.06	260.57	157.5
3651.00	0.65	173.19	3631.11	261.46	-241.69	99.79	0.17	261.48	157.5
							0.17		
3746.00	0.67	157.21	3726.10	262.54	-242.74	100.07	0.19	262.55	157.6
3841.00	0.59	154.21	3821.10	263.58	-243.69	100.50	0.09	263.60	157 5
3936.00	0.24	309.36	3916.09	263.89	-244.00	100.55	0.86	263 91	157.6
4031.00	0.30	302.31	4011 09	263.51	-243.74	100.19	0.07	263.53	157.6
4126.00	0.45	322.60	4106.09	262.95	-243.32	99.75	0.21	262.97	157.7
4222.00	1.06	337.45	4202.08	261.69	-242.20	99.18	0.21	261.72	157.7
4317.00	0.86	37.93	4297.07	260.47	-240.82	99.29	1.03	260.49	157.5
4412.00	0.59	7.90	4392.06	259.70	-239.78	99.79	0.48	259.71	157.4
4507.00	1.14	0.19	4487.05	258.42	-238.35	99.86	0.59	258.42	157.2
4602.00	1 01	346 16	4582.04	256.72	-236.59	99.66	0.31	256.72	157.1
4667.00	1.10	18.68	4647.03	255.69	-235.44	99.73	0.92	255.69	157.0
									156.8
4729.00	0.53	71.05	4709.02	255.27	-234.78	100.19	1.42	255.27	130.8
4824.00	0.28	38.14	4804.02	255.19	-234 46	100.75	0.35	255.19	156.7
4920.00	0.71	12.94	4900.01	254.59	-233.69	101.03	0.49	254.60	156.6
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	156.2
5206.00	0.28	132.80	5185.98	251.60	-230.03	101.99	1.00	251.63	156.0
5204.00	0.54	22.07	5000.00	054.54	000.70	400.04	0.70	054.54	455.0
5301.00	0.54	23.07	5280.98	251.51	-229.78	102.34	0.72	251.54	155.9
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
	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 Co-ordinate(NE) Reference:

Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:

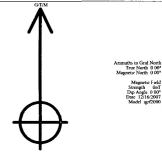
	MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
	5681.00	1.09	194.79	5660.90	256.59	-235.04	102.96	1.12	256.60	156.34
	5745.00	0.67	318.43	5724.89	256.71	-235.35	102.55	2.44	256.72	156.45
	5839.00	0.24	221.30	5818.89	256.28	-235.08	102.06	0.79	256.28	156.53
	5935.00	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
l i	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

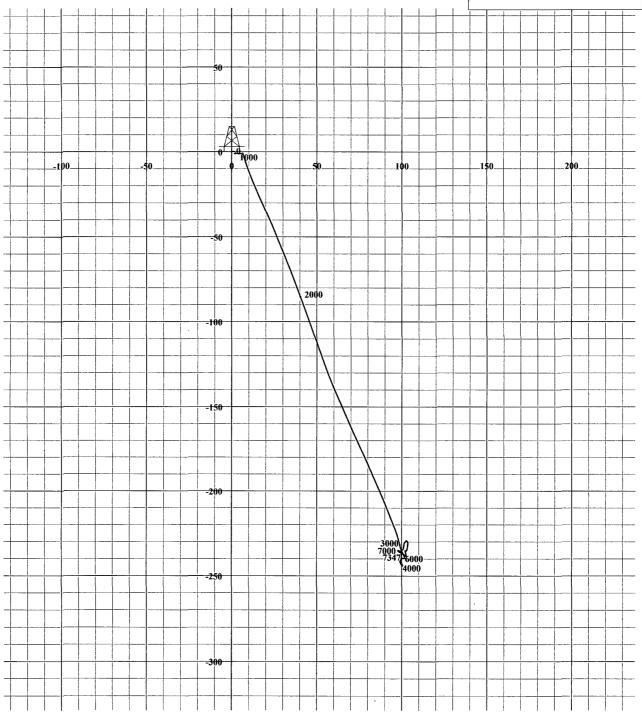


South(-)/North(+) [50ft/in]

Field: Chalk Bluff

Site: Eddy County, NM
Well: State H #2
Wellpath: DH - Job #32D11071006
Survey: 11/05/07-11/14/07





West(-)/East(+) [50ft/in]

### 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

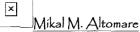
Importance: High

### 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 overnighting 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



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

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3/5/2008

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Submit 3 Copies To Appropriate District  Office  State of New Mex Office	
District   Energy, Minerals and Natur 1625 N French Dr., Hobbs, NM 88240	WELL API NO.
District II 1301 W Grand Ave , Artesia, NM 8821 0 OIL CONSERVATION	DIVISION 30-015-35814 5. Indicate Type of Lease
District III 1220 South St. France London NM 8741 0	CIS Dr. STATE X FEE
District IV 1220 S. St. Francis Dr., Santa Fe, NM  Oldana (2000)	6. State Oil & Gas Lease No.
87505 RECOLO (1 (11/11) OF	B-9391
SUNDRY NOTICES AND REPORTS ON WELL'S  (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLU  DIFFERENT RESERVOIR, USE "APPLICATION FOR PERMIT" (FORM C-101) FOR	
PROPOSALS)  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	10. Pool Name or Wildcat
P.O. Box 960 Artesia, NM 88210	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 Rat	
11. Elevation (Show whether DR 3590)	
12. Check Appropriate Box to Indicate Na	ture of Notice, Report or Other Data
NOTICE OF INTENTION TO:  PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐	SUBSEQUENT REPORT OF: REMEDIALWORK ☐ ALTERING CASING ☐
PERFORM REMEDIAL WORK PLUG AND ABANDON FEMPORARILY ABANDON CHANGE PLANS	REMEDIALWORK ALTERING CASING COMMENCE DRILLING OPNS. P AND A
PULL OR ALTER CASING MULTIPLE COMPL	CASING/CEMENT JOB
DOWNHOLE COMMINGLE	
OTHER:  13. Describe proposed or completed operations. (Clearly state all pe	OTHER: Workover
	Completions: Attach wellbore diagram of proposed completion
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 10	6/30-36-414-gals-40#-gel
2/21/2008 Perforated 3364-3677', 72 holes.	5750, 50,414 gais 40m gci.
2/22/2008 Acidized w/ 2,500 gals 15% NEFE Acid.	16/20 15 200// 01/ - D 16/20 25 200 - 1 40// 1
2/25/2008 Frac w/ 8,000# LiteProp 125 14/30, 73,600# White Sand 2/27/2008 R1H w/ 134jts 2 7/8" J-55 6.5# tubing, SN @ 4243', 2 1/2	
	RECEIVED
	SEP <b>2 0</b> 2012
Spud Date: Rig Release Dat	e: NMOCD ARTES!A
10/31/2007	11/22/2007
I hereby certify that the information above is true slid complete to the be-	st of my knowledge and belief.
Dogwa Llaguar	Cupia
SIGNATURE JUM WUUU TITLE Product	
Type or print name Deana Weaver E-mail address:	dweaver@mec.com PHONE: (575)748-1288
APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPROVED BY: APPRO	Tollwor DATE 9/26/12
Conditions of Approval (if any):	DATE 15 77



# NAVAJO REFINING COMPANY Map ID No. マム Artificial Penetration Review

OPERATOR Mewbourne Oil Co. LEASE Chalk Bluff Fed WELL NUMBER Com 003 DRILLED 11-24-92 PLUGGED NA	STATUS ACTIVE GAS LOCATION Sec. 1 -T18S-R27E  MUD FILLED BOREHOLE MA  TOP OF INJECTION ZONE 7345'  API NO. 30-015- 27163				
REMARKS: Calc. Top of Cement	behind 7"@ 9101				
	_ 133/8"@ 400'ω/100 sx				
	~95/8"@ 2600' w/250 sx				
	∠ 7"@ 8968' ω/1Z∞ sx				
	Perfs: 9950'- 9954' Perfs: 9957'- 9972'				
7	278" +bg@ 9972'pkr@ 9797'				
	41/2" @ 8600'-10,150' W/200 sx				
TD 10150'					



NAVAJO REFINING COMPANY, L.L.C. Map ID No. 99 Artificial Penetration Review

	ewbourne Oil
LEASE <u>Chalk</u>	Bluff Federal
WELL NUMBER	3
DRILLED \	116 93
PLUGGED	VA

STATUS PCHIVE

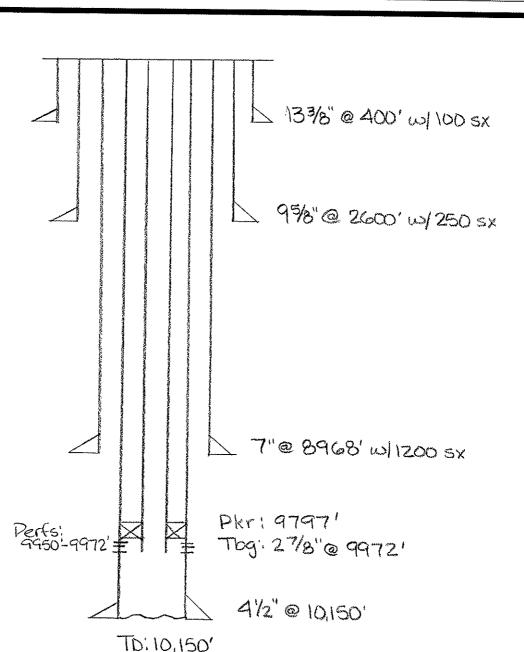
LOCATION Sec. 1 -T | 8 - R 27 E

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% CaCL2 + 1/4#/sack of cellophane flakes followed by 200 sacks of Class "C" containing 3% CaCL2.

### Intermediate Casing:

700 sacks of Class "C" containing 6% gel + 2% CaCL2 + 1/2#/sack of cellophane flakes + 5#/sack of Gilsonite followed by 200 sacks of CLass "C" containing 3% CaCL2

### 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.

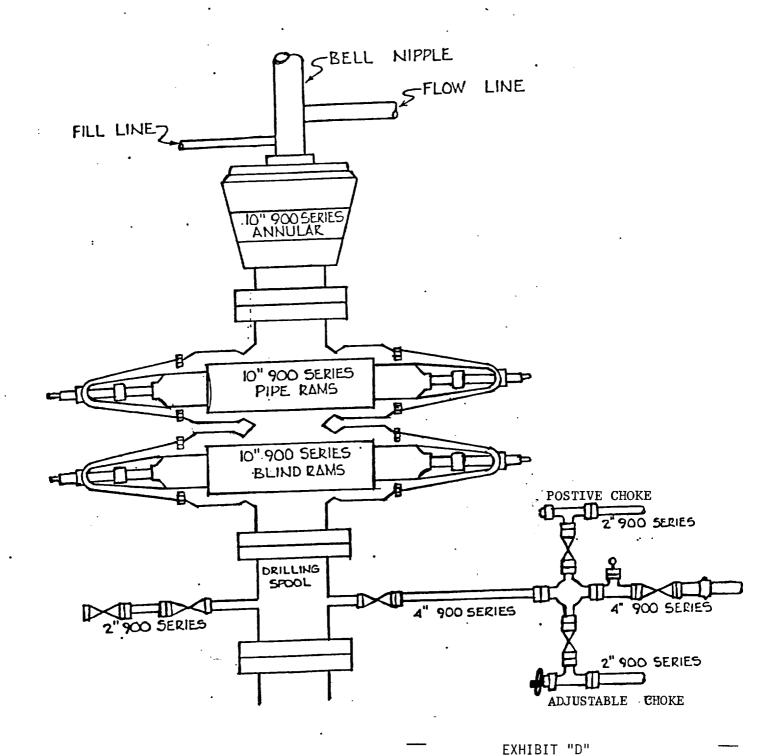
- 3.) Drilling time will require approximately 35 40 days and drilling operations should begin approximately November 1, 1992.
- 4.) The possibility of encountering H2S gas in this area remote. Mewbourne Oil Company has drilled offset wells to this proposed location and none of these wells have encountered any H2S gas in the Pennsylvanian. In the event H2S is encountered, the necessary H2S safety equipment will be installed on location to provide for a safe working environment.
- 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.

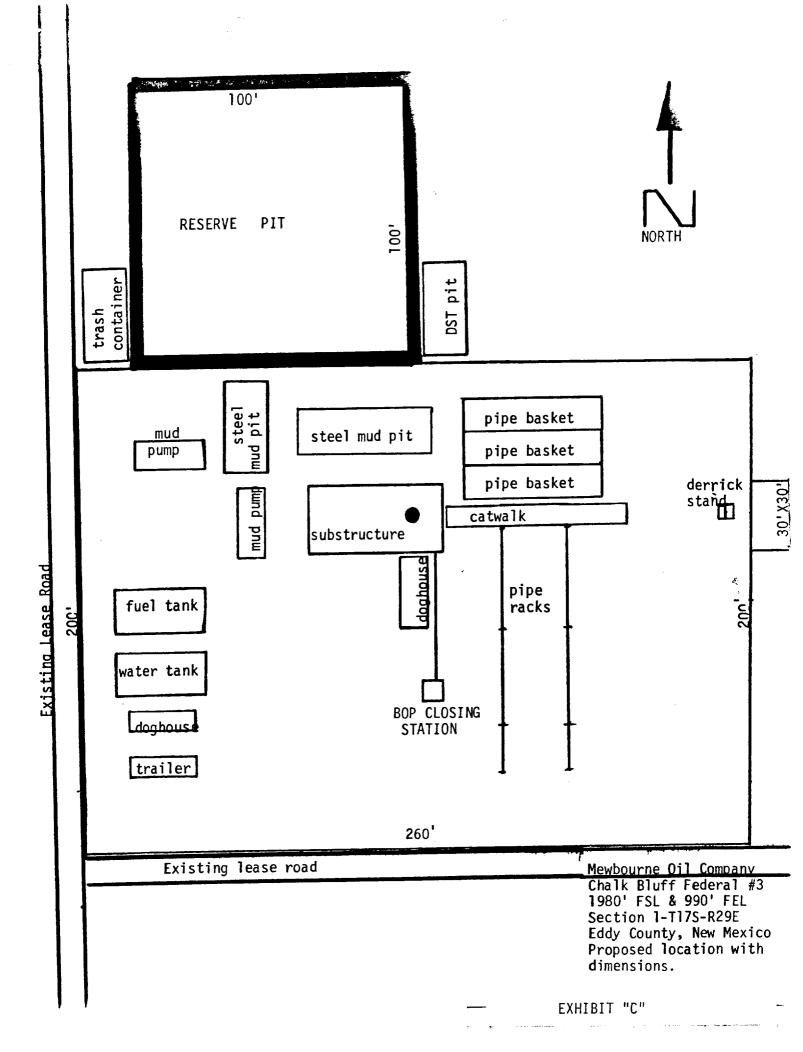
10

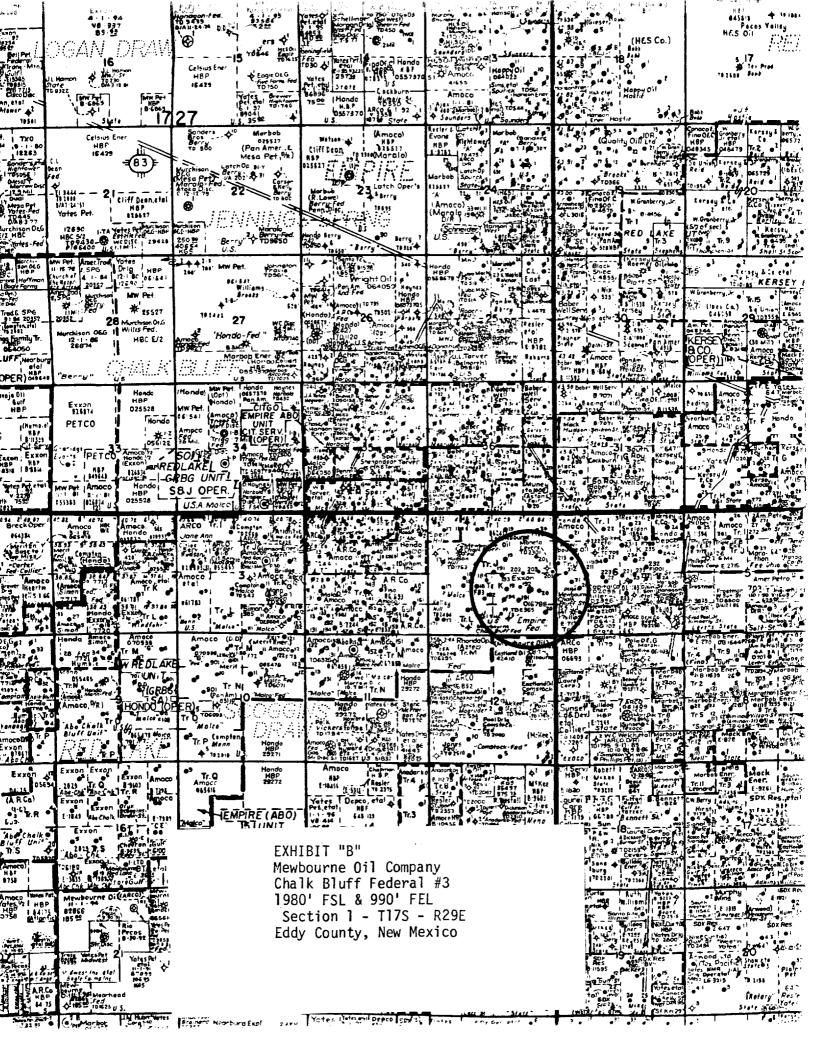
7.) The pressure rating on the BOP STACK (see exhibit "D" of the APD) is 3,000# psi. The correct pressure rating of ANSI 900 series is noted in the APD. The API standard for pressure ratings for flanged equipment is in ANSI series. ANSI 600 series is 2,000# psi working pressure test, ANSI 900 series is 3,000# psi working pressure, ANSI 1500 series is 5,000# psi work-pressure.

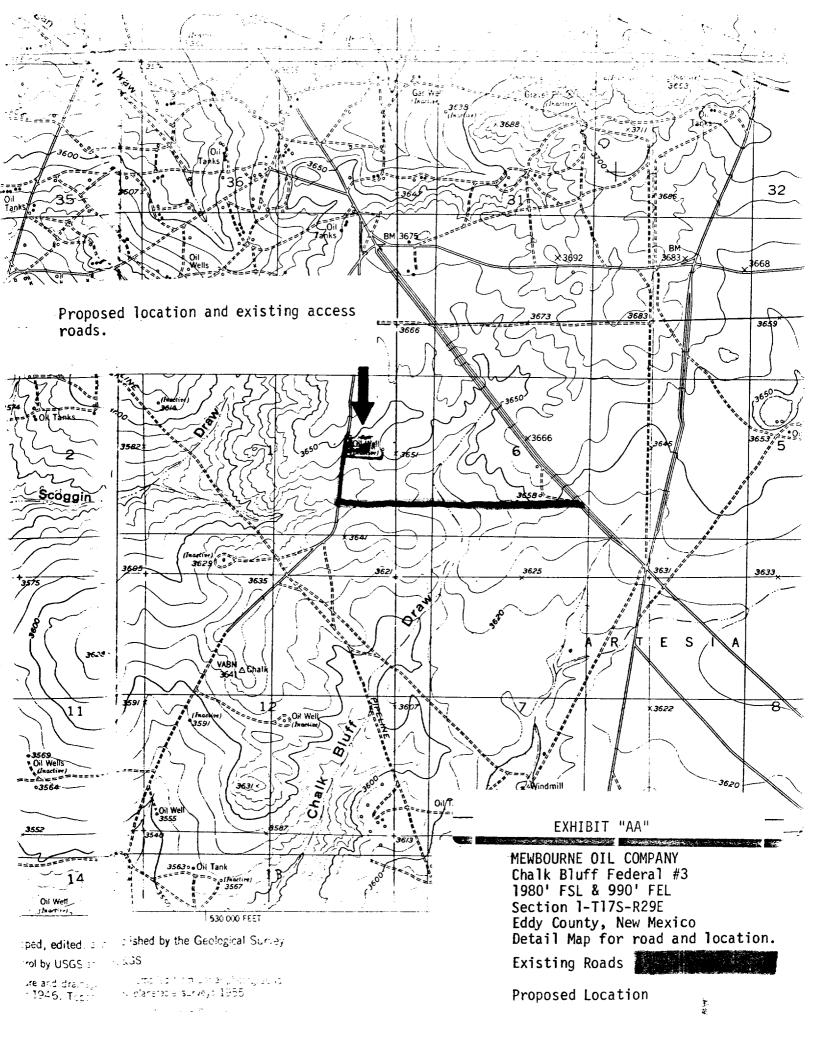
LEASE NAME:			DERAL #3	TYPE OF CSG		PRODUCTION
LEGALS:	SEC 1-1			DEPTH OF CS	3:	10,300
CASING MINIMUM PERFOR	MANCE PI	ROPERTIE				
CSG TYPE			K-FACTOR	COLLAPSE	BURST	TENSION
1 5 1/2" 20# N-80 LT&C			991,000	8830	9190	428000
2 5 1/2" 17# N-80 LT&C			844,000	6380	7740	348000
3 5 1/2" 20# N-80 LT&	2		991,000	8830	9190	428000
4						
5						
GRADE OF CASING:	85	% OF NE	W			
CSG TYPE				COLLAPSE	BURST	TENSION
1 5 1/2" 20# N-80 LT&				7506	7812	363800
2 5 1/2" 17# N-80 LT&				5423	6579	295800
3 5 1/2" 20# N-80 LT&				7506	7812	363800
4 0				0	0	0
5 0				0	0	0
SETTING DEPTH (WT. OF	CSG IN AI	R)	CASING	INTERVAL	INTERVAL	CUMMULATIVE
FROM	TO	_	WT. (LB/FT)	LGTH (FT.)	WT. (LBS)	WT. (LBS)
1 0	1,000		20	1000	20,000	181,100
2 1,000	9,300		17	8300	141,100	161,100
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WELLBORE CONDITIONS						
MUD WEIGHT:		PPG				
BOUYANCY FACTOR		(AIR =	•			
DISPLACEMENT FLUID WT	8.5	PPG	ANNULAR	COLLAPSE	HOLE	
			HYDROSTATIC	-	HYDROSTATIC	
DEPTH	_		PRESSURE	LOADING	PRESSURE	TENSION
0			0	5000	0	154,478
1 1000			499	5982	442	137,418
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5 0 FINIAL CASING DESIGN		·		SAFTEY FACT		
FINIAL CASING DESIGN				COLLAPSE	BURST	TENSION
	FROM	TO	LENGTH	>1.125	>1.00	>2.00
0	PROM 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" 1/# N-80 LT&C 5 1/2" 20# N-80 LT&C	1,000	1,000	1000	11.983	17.673	2.355
2 1/2" ZU# N-80 LT&C	1,000	U	1000	11.703	2,.075	21000

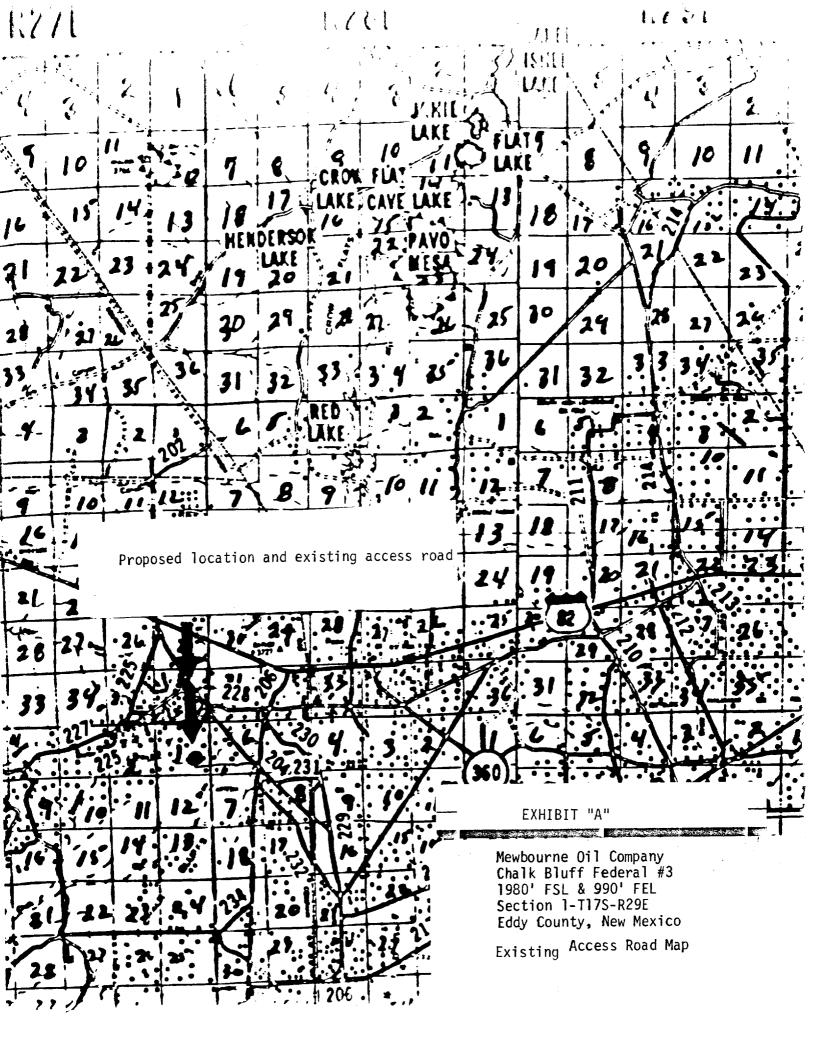


Mewbourne Oil Company Chalk Bluff Federal #3 1980' FSL & 990' FEL Section 1-T17S-R29E Eddy County, New Mexico









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

# State of New Mexico cnergy, Minerals and Natural Resources Department

Form C-102 Revised 1-1-89

### **OIL CONSERVATION DIVISION**

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

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

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

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

				- HOLL CO.					
Operator				Leass				Well No.	
MEWBOURNE		ANY			BLUFF	FEDERAL	- TA:	3	
Unit Letter	Section	Township		Range	T.4.0M		County	DDW	
I	1	18	SOUTH	21	EAST	NMPA	41 EI	DDY	
Actual Footage Loca		מיים זיים		990	`		EAST		
1980 Ground level Elev.	feet from the	SOUTH ducing Formation	line and	Pool	<del>'</del>	feet from	n the Times	line Dedicated Acre	206.
	ł	•				o 14	•	1	
3628		orrow	at well by colored p			Camp Morr	OW	320	Acres
2. If more	than one lease	is dedicated to the	well, outline each ar hip is dedicated to t	d identify the ow	menhip thereo	f (both as to work			
	ion, force-poolin	ng, etc.?	If answer is "yes" t		_	nmunitizat	_		
If answer		wners and tract de	scriptions which hav	e actually been o					
this form	if neccessary.		til all interests have	haan ganaalidata	d Oby communic	tication maiticati	a formal modic	a or otherwise)	
			ul all interests have interest, has been a			Greensii miintelik	ur totcen-boom	er omerwise)	
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	ļ							ne Oil Com	npany
	1				 		Date August	31. 1992	
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Engr.					!	500			
					l I		on this plat v	was plotted from	location shown n field notes of
	i				9	200'	actual surveys	s made by me	e or under my me is true and
	i					90 —	correct to th	e best of my	knowledge and
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0 330 660	290 1320	1650 1980 231	0 2540 1	200 1500	1000	500 0	Sast	العظيمة والإدارة	

### 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 be-

tween 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. OPERATOR'S REPRESENTATIVES:

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

Kelly Ryan(505) 393-5905Box 5270Bill Pierce24. hour asweringHobbs, NMGreg Milnerservice.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 surroundthe 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 environmental 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)

# Dra NEED STATES

SUBMIT IN TRIPLICATE. ions on le) (Other ins' revers

Form approved. Budget Bureau No. 1004

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DEPARTMENT OF STAF INTERIOR

BUREAU OF LAND MANAGEMENT					NM-0 <del>16788</del> 055737/			
APPLICATION	I FOR PERMIT	TO DRILL, I	DEEPEN	, OR PL	.UG B	ACK	6. IF INDIAN, ALLOT	
Ia. TYPE OF WORK  DRI  b. TYPE OF WELL	LL XXX	DEEPEN [		PLU	G BAC	CK 🗆	7. UNIT AGREEMENT	NAMB
	S Y OTHER		Bingi Zone	* (X)	MULTIPE ZONE	La 🔲	8. FARM OR LEASE !	EMA
NAME OF OPERATOR	/	······································			CEIVE	0	Chalk Bluff	Fed. Comm.
Mewbourne Oil	Company				·		9. WELL NO.	
			-	Car	1319	292	3	
Box 5270	Hobbs, New	Mexico 8824	h ann Stat				10. FIELD AND POOL	
LOCATION OF WELL (Re At surface	eport location clearly a		_	e requirement	i°C. D.	4	North Illino	
1980' FSL ar At proposed prod. son Same		vit.	I	V west &	<u> </u>	#Ĵŧ	AND SURVEY OR 185 1-T17S-R2	1E
4. DISTANCE IN MILES A	ND DIRECTION FROM N	EAREST TOWN OR POS	T OFFICE.				12. COUNTY OR PARH	
12 miles sou	utheast of Art	esia. New Me	xico				Eddy	NM
5. DISTANCE FROM PROPO	SED*			F ACRES IN I	æase		F ACRES ASSIGNED	1
PROPERTY OR LEASE L (Also to nearest drig	INE, FT.	990'		320		10 11	320	
S. DISTANCE FROM PROP	OSED LOCATION*	330		SED DEPTH		20. ROTAL	RY OR CABLE TOOLS	
TO NEAREST WELL, DI OR APPLIED FOR, ON THE		2040'	10,	3001		Ro	tary	
1. ELEVATIONS (Show whe	ther DF, RT, GR, etc.)						i	VORK WILL START*
3628	GR						Upon BLM ap	proval
3.		PROPOSED CASI	NG AND C	EMENTING F	PROGRAM	4	Water Basin	1
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	00Т	SETTING DE	РТН		QUANTITY OF CEM	
17 1/2"	13 3/8"	61#		400' ±		450 s	ks. Class C	circulated
12 1/4"	9 5/8"	36#		2,600'	+		s. Tie back	
8 3/4"	5 1/2"	17 & 20#		10,300'	+	600 sk	s. of Class	
Mud Program:		•	,	ŕ		ı	10	+ ID-1 -16-92
0-400' Spud   400' - 2600'   2,600' - 8500'	mud with fresl Fresh water go Cut brine w needed.	el and lime.	LCM as	s needed			-	NC. LCM as
8,500 - 10.300	' Cut brine v	WL 10 CC or 1	salt (	gel, lim Raise we	e, so eight	da ash, accordi	and starch. ngly if abno	Wt. 9.2 - rmal pressur
BOP PROGRAM:								
900 series BOP	and Hydrill	on 13 3/8" su	ırface	casing a	nd on	9 5/8"	'intermediat	e casing.
Gas is not ded N ABOVE SPACE DESCRIBE One. If proposal is to treventer program, if an	PROPOSED PROGRAM: drill or deepen directi	If proposal is to deep onally, give pertinent	pen or plug t data on s	back, give d ubsurface loc	ata on pr ations an	esent produ d measured	nctive sone and propo and true vertical dep	sed new productive ths. Give blowout
SIGNED	Tya	TI	LE Dist	rict Sup	erint	endent	DATE _09/0	9/1992
	ral or State office use)							
PERMIT NO.			AP	PROVAL DATE				11 00
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APPROVED BY			rl <b>e</b>	· · · · · · · · · · · · · · · · · · ·	1,944.4		DATE	AFTE !
CONDITIONS OF APPROVAL SI	ĵijĔĊŤ <sup>*</sup> †o						/	-6C/VC
	QUIREMENTS AND						1	SEP. "LO

SPECIAL STIPULATIONS

\*See Instructions On Reverse Side

Title 18 ATTACKECTion 1001, makes it a crime for any person knowingly and willfully to make to any department of 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 operators, 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 mumber 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.

# **BOTICE**

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 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 opera-

tion 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 opera-

tions on an oil and gas lease.

/

UN 0 4 1993

June 1990) DEPARTMEN	TED STATES O. C. D. TOF THE INTERIOR ABYER LAND MANAGEMENT	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993  5. Lease Designation and Serial No.
SUNDRY NOTICES  Do not use this form for proposals to de  Use "APPLICATION FO	NM-0557377  6. If Indian, Allottee or Tribe Name  Oir.	
SUBMIT	T IN TRIPLICATE	7. If Unit or CA, Agreement Designation
Oil Sec. 1-T18S-R27E  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  Other  O	Description)	8. Well Name and No. Chalk Bluff Federal 9. API Well No. 3001527163 10. Field and Pool, or Exploratory Area North Illinois Camp 11. County or Parish, State Morrow Eddy Co., N.M.
	(s) TO INDICATE NATURE OF NOTICE, RE	
TYPE OF SUBMISSION	TYPE OF ACT	ION
Notice of Intent  Subsequent Report  Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing	Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off  Conversion to Injection

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.)\*

Other Spud well & cemented

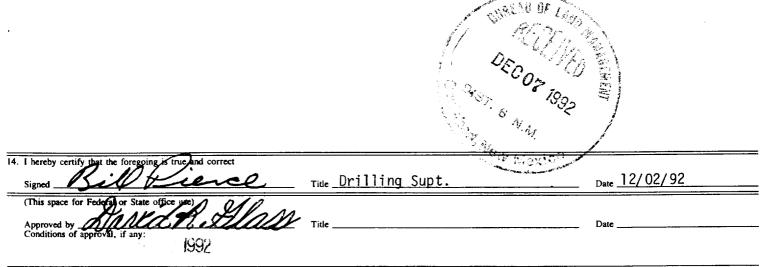
13-3/8" surf. csq.

Dispose Water

(Note: Report results of multiple completion on Well

Completion or Recompletion Report and Log form.)

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.



### GENERAL INSTRUCTIONS

structions 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.

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 in-

### SPECIFIC INSTRUCTIONS

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 the depth to top of any left in the hole; method of closing to pulled and date well site conditioned for final inspection looking to approval of the abandonment.

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.

liem 13—Proposals to abandon a well and subsequent reports of abandon-ment 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

### 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.

(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
- (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 of recognitions.

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 of Land Management, (Alternate) Bureau of Claiset, (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.

en'2' CbO: 1000-113-016\5010

CISF

RECEIVED

Form 3160-5 (June 1990)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

JAN 0 4 1993

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 Oil Gas Well Well Other		8. Well Name and No.
2. Name of Operator		Chalk Bluff Federal  9. API Well No. Comm. #3
Mewbourne Oil Company  3. Address and Telephone No.		3001527163
P.O. Box 5270 Hobbs, New Me	exico 88241 (505) 393-5905	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec. T. R., M., or Survey D. 1980' FSL & 1980' FEL Sec. 1-T18S-R27E		N. Illinois Camp Morro  11. County or Parish, State  Eddy Co New Mexico
12. CHECK APPROPRIATE BOX	(s) TO INDICATE NATURE OF NOTICE, REPO	
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	Abandonment	Change of Plans
Subsequent Report	Recompletion Plugging Back	New Construction Non-Routine Fracturing
Final Abandonment Notice	Casing Repair  Altering Casing Other Cement 9-5/8" Inter.  Casing	Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
ST&C casing and set @ 2600'   containing 6% gel + 10 pps N	hole to 2600' KB. Ran 59 joints of KB. Western cemented with 590 sacks aCl + 1/4 pps celloseal followed by 2 rculated 50 sacks of cement to the pi	of Class "C" lite 50 sacks of Class
14. I hereby certify that the foregoing is true and correct	Drilling Supt.	12-02-92
(This space for Federa of State office use)  Approved by Conditions of approval, if any:	Title	Date

### **GENERAL INSTRUCTIONS**

structions 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.

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 in-

### SPECIFIC INSTRUCTIONS

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; mund 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 the depth to top of any left in the hole; method of closing to approval of and date well site conditioned for final inspection looking to approval of the abandonment.

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 abandon-ment 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

### 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 lesse.

(1) Evaluate the equipment and procedures used during the proposed or completed subsequent ROUTINE USES:

- 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
- (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 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.

en'2' CbO1 1880-113-816/56018

Form 3160-5 (June 1990)

# UNITED STATES . DEFARTMENT OF THE INTERIOR

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993
ase Designation and Seria! No

Metabourne 0:1 Company 3. Address and Telephone No. 9. A ST Well No. 9. O Rex. 5270 Hohbs, New Mexico BR241 4. Location of Well (Frootage, Seg. T. R. M. or Survey Description) 1980' FSL & 1980' FSL & 1980' FEL Sec. 1-T185-R27E  12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF SUBMISSION  TO Change of Plans  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New Construction  New	BUREAU OF	LAND MANAGEMENT	5. Lease Designation and Seria. No
SUBMIT IN TRIPLICATE  1. Type of Well	Do not use this form for proposals to d	rill or to deepen or reentry to a different reservoir.	
New House and No.   Chalk Bluff Fed. Come   Section of Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section			7. If Unit or CA, Agreement Designation
See   See   Other		I IN TRIPLICATE	4
Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.   Approve No.			<b>↓</b> • • • • • • • • • • • • • • • • • • •
Address and Telephone No.  P. D. Roy. 5.770. Hobbs. New Mexico. 88241  P. D. Roy. 5.770. Hobbs. New Mexico. 88241  P. D. Roy. 5.770. Hobbs. New Mexico. 88241  P. D. Roy. 5.770. Hobbs. New Mexico. 88241  P. D. Roy. 5.770. Hobbs. New Mexico. 88241  P. D. Roy. 5.770. Hobbs. New Mexico. 88241  P. D. Roy. 5.770. Hobbs. New Mexico. 88241  P. D. Roy. 5.770. Hobbs. New Mexico. 88241  P. D. Roy. 5.770. Hobbs. New Mexico. 88241  P. D. Roy. 5.770. Hobbs. New Mexico. 88241  P. D. Roy. 5.770. Hobbs. New Construction  Nortice of Instead  Recompletion  Recompletion  Recompletion  Recompletion  Recompletion  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Water Shut-Off  Conversion to Injection  Non Resister Fracturing  Non Resister Fracturing  Non Resister Fracturing  Non Resister Fracturing  Non Resister Fracturing  N	2. Name of Operator	[ \$ Q () < 100 }	Chalk Bluff Fed. Comm. 3
4 Location of Well (Fronzage Sec. T. R. M. or Survey Description)  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990  1980' FSL & 1990	Mewbourne Oil Company		1
N. Illinois Camp More   1980' FSL & 1980 FEL   Eddy	·		
1980' FSL & 1960' FEL Sec. 1-T18S-R27E  CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  TYPE OF ACTION  Notice of Intent Recompletion Plugging Back Plugging Back Plugging Back Recompletion Plugging Back Non-Routine Fracturing Water Shate Off Conversion to Injection Other Cement 7" Casing Other Cement 7" Casing Other Cement 7" Casing Conversion to Injection Dispose Water  13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, sucluding estimated date of stating and recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion in Recompletion In Recompletion In Recompletion In Recompletion In Recompletion In Recompletion In	P O Box 52/U Honds, New M 4. Location of Well (Footage, Sec., T., R., M., or Survey		N. Illinois Camp Morrow
TYPE OF SUBMISSION    Notice of Intent   Abandonment   Change of Plans   New Construction   New Construction   New Construction   New Construction   Non-Routine Fracturing   Conversion to lapsetion   Non-Routine Fracturing   Conversion to lapsetion   Non-Routine Fracturing   Conversion to lapsetion   Non-Routine Fracturing   Conversion to lapsetion   Non-Routine Fracturing   Conversion to lapsetion   Non-Routine Fracturing   Conversion to lapsetion   Non-Routine Fracturing   Conversion to lapsetion   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fracturing   Non-Routine Fra			
Notice of Inters	2. CHECK APPROPRIATE BOX	(s) TO INDICATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
Recompletion   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Construction   New Constructio	TYPE OF SUBMISSION	TYPE OF ACTION	
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Casing Repair   Casing   Casing   Casing   Casing   Casing   Conversion to Injection   Conversion to Injection   Conversion to Injection   Conversion to Injection   Dispose Water (Nata: Report multiple completion on Water (Nata: Report multiple completion on Water (Nata: Report multiple completion on Water (Nata: Report multiple completion on Water (Nata: Report multiple completion on Water (Nata: Report multiple control of all multiple control of all multiple control of all multiple control of all multiple control of all multiple control of all multiple control of this work.)    Complete returns @ 7683'   Dry drilled 8-3/4" hole the 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    ACC   SCD   DAVID R GLASS   CONTROL   CARLSEND, NEW MERICO   CARLSEND, NEW MERICO   CARLSEND, NEW MERICO   CARLSEND, NEW MERICO   CARLSEND, NEW MERICO   CARLSEND, NEW MERICO   CARLSEND, NEW MERICO   Carls   Control of the control of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of the carlot of		Recompletion	New Construction
Sinal Abandonment Notice   Altering Casing   Conversion to Injection   Dispose Water (Note: Report author of Cement 7" casing   Conversion to Injection   Dispose Water (Note: Report author of Completed Operations (Clean's state All pertisent details, and give pertisent dates, including estimated date of starting any proposed work. If well is directionally drill give subsurface locations and measured authoric 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    ACC   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS   DIVIDITE GLASS	Subsequent Report	·	
Other Cement 7" casing Other Cement 7" casing Other Report results of multiple completion on Well Completion of Recompletion on Report results of multiple completion on Report results of multiple completion on Report results of Report results of multiple completion on Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report results of Report result	П		
(Note: Report results of multiple completion on Well Source of Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date, of starting any proposed work. If well is directionally drill give subsurface locations and measured and frue vertical depths for all markers and zones pertinent to this work.)*  Lost complete returns @ 7683' Dry drilled 8-3/4" hole the 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    ACC   SGD   DAVID R GLASS   C   C   C   C   C   C   C   C   C	☐ Final Abandonment Notice	Other Cement 7" casing	<u></u>
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    ACC			(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
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ACCURED FOR RESORD  OR G. SGD.) DAVID R GLASS  FEB 4 1993  CARLSEAD, NEW MERICO  Title Drilling Superintendent  Date 01/20/93  Approved by	26# & 29#, N-80 & S-95 grade @ 6997' and external casing sks. of Class "H" containing Lite. Set ECP and opened DV containing 1 pps celloseal +	used API casing and set @ 8968'. Mulpacker @ 7026'. Western cemented the 8 pps CSE + .75% CF-14 + 5 pps Gilson tool. Cemented 2nd stage w/750 sks. 5 pps gilsonite + 3% salt followed by	Itiple stage cementer first stage w/350 nite + .35% Thrifty of Class "C"
Signed	14. I hereby certify that the foregoing is true and correct	OR G. SGD.) DAVID R. G.	RECEIVED RELEGION AN 'S
(This space for Federal or State office use)  Approved by	Will treeses	Title Drilling Superintendent	Date 01/20/93
Approved by			
Approved by		Title	Date
Conditions of approval, it any.	Conditions of approval, if any:		

Form	3160-5
(June	1990)

1. Type of Well Oil Well

12.

2. Name of Operator

3. Address and Telephone No.

Other

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

P.O. Box 5270 Hobbs, New Mexico 88241

Mewbourne Oil Company

1980' FSL & 1<del>980</del>

### UNITED STATES . DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1973

5. Lease Designation and Serial No

6. If Indian, Allottee or Tribe Name

NM-055737<u>1</u>

	SUNDRY NOTICES AND REPORTS ON WELLS
not use this	form for proposals to drill or to deepen or reentry to a different reservoir.

Do Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

-	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

>0 <u>-</u>

Eddv

Sec. 1-T18S-R27E		244)
	OX(s) TO INDICATE NATURE OF NOTICE, RE	PORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent  Subsequent Report  Final Abandonment Notice	Abandonment  Recompletion  Plugging Back  Casing Repair  Altering Casing  Other Run 4-1/2" Liner	Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off  Conversion to Injection  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

	ACCOMED CORRESPOND  (PRIG. SGD.) DAVID R. GLA  (C. 1993	RECEIVED  N. 25 9 40 M '93  AREA TO SERVED  SS
4. I hereby certify that the foregoing is trade and correct Signed Signed	Title _ Drilling Superintendent	Date01/21/93
(This space for Federal or State office use)  Approved by Conditions of approval, if any:	Title	Date

SEC	twn/8 ··· re	z <u>27</u>	API # 30	-015-27163
	Š			
OPERA	TOR MEWBOUR	VE OIL CO		·
		LUFF FEO COM #3	·	
STATE	E OCD TOPS AS P	ER MARK ASHLE		DATE /-25-93
			•	
Sa	utheastern New	Mevico	Northweste	rn New Mexico
У	T. Car T. Stra	9932	T. Kirrland-Foritized	T. Penn. "C"
		9491	7. Picmed Cliffs	T. Penn. "D"
<b></b>	450 T Mis	3	T. Cliff House	T. Lezdville
vers	565 T.DE	ronian	T. Menefee	T. Madison
27	//59 T. Silv	rian	T. Point Lookout	T. Elbert
yburg		moya	T. Mancos	T. McCracken
Andres		apson	T. Gallup	T. Ignacio Otzae
rieta		Kee	Base Greenhorn	T. Granite
idock	TEI	enburger	T. Dakora	<u>T</u>
nebry	T. Gr	Wash	T. Morrison	_ <u>T</u>
ob	4760 T. De	laware Sand	T. Todilto	<u>T.</u>
nkard	. 7 76	ne Smines	T. Engada	<u>T.</u>
0	5745 <b>T.</b> △	notion is 971		<u>T</u>
olfcamp			T. Chinie	·
nii	7970		T. Pennain	
sco (Bough C			T. Penn "A"	T
1. from	to	OIL OR GAS	S SANDS OR ZONES No. 3, from	
2. from				

IMPORTANT WATER SANDS

No. 2, from \_\_\_\_\_\_feet 

REMARKS:

Include data on rate of water inflow and elevation to which water rose in hole.

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

# State of New Mexico Energy, Minerals and Natural Resources Department

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

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

# OIL CONSERVATION DIVISION

P.O. Box 2088

RECEIVED

DISTRICT III
1000 Rio Respons Rd. Aziec. NM 87410

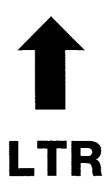
Santa Fe, New Mexico 87504-2088

			ALLOWA						O. C. [	). P <b>S</b> YCE				
Operator						Well API No.								
Mewbourne Oil Company	<u>/</u>					30-015-27163								
	New Mex	ico 8	88241											
Reason(s) for Filing (Check proper box)  New Well	•	anna in Ton	nsporter of:		Othe	t (Piease expi	lain)							
New Well  Recompletion	Oil	-	y Gas											
Change in Operator	Cazinghead G	`	ndensate 🔲											
f change of operator give name and address of previous operator			***************************************									<del></del>		
II. DESCRIPTION OF WELL														
Lease Name	<b>I</b>	I .	oi Name, inclu	-	ng Formation Nois Camp Morrow			Kind of Lease			Lease No. NM-0557371			
Chalk Bluff Federal Con Location					anı					1.*				
Unit LetterI	1980	) Fe	et From The 2	South	Line	and	90	Fee	t From The		East	Line		
Section Township		, NMPM,					Eddy County							
III. DESIGNATION OF TRANS	SPORTER (	OF OIL	AND NAT	URAL G	AS									
						Address (Give address to which approved copy of this form is to be sent)								
amoco Pipeline IPC ame of Authorized Transporter of Casinghead Gas or Dry Gas					502 N. West Ave. Levell  Address (Give address to which approved a									
Transwestern Pineline (		P.O.	P.O. Box 1188 Houston				Téxas	7725	51	•				
If well produces oil or liquids, give location of tanks.	Unit Se	•	и <b>р.   Re</b> 18 <b>5  </b> 27E						en ? 01/15/93					
If this production is commingled with that f	rom any other i	sase or poo	l, give commin	gling order	numb	er:	Vone							
IV. COMPLETION DATA	- lc	Nell Well	Gas Well	New W	/ell	Workover	De	epen	Plug Back	Same	Res'v	Diff Res'v		
Designate Type of Completion -		ni wen	X	X	, 	WOLZOTO	1	,   		i				
Date Spudded	Date Compl. F	_		Total De	pth	10.15	0.1		P.B.T.D.	10	1001			
11/24/92		01/16,		Top Oil/	Cae P	10,150	0.		T. 1 D		,102'			
Elevations (DF, RKB, RT, GR, etc.) Name of Producing Formation  KB 3643' DF 3641' GL 3628' Lower Mornow					9950'					Tubing Depth 9972'				
Perforations										Depth Casing Shoe				
9950'-9954' 9957'-9972'											10,150'			
	TUBING, CASING ANI				<del></del>					OACKO OFMENT				
HOLE SIZE	CASING & TU				<b>DEPTH SET</b> 400'						POST ID-2			
17-1/2" 12-1/4"	13-3/8" 9-5/8"		.5# 36#				600'							
8-3/4"	7"		26#		8,968									
6"	4-1/2"			8,60	.600' to 10.150'				200 sacks					
V. TEST DATA AND REQUES	T FOR AL	LOWAB	LE 2	-3/8"	& 2	-7/8"								
OIL WELL (Test must be after re		volume of l	oad oil and mi							for full	24 hou	3.)		
Date First New Oil Run To Tank	Date of Test	Producin	Producing Method (Flow, pump, gas lift, et											
Length of Test	Tubing Pressu	Tubing Pressure			Casing Pressure					Choke Size				
Actual Prod. During Test	Oil - Bbls.			Water -	Water - Bbis.					Gas- MCF				
GAS WELL			<del></del>	, 1					<del>1</del>		·			
Actual Prod. Test - MCF/D	Length of Tes	l .		Bbls. Co	adea	sate/MMCF	-		Gravity of		sate			
2000 MCF/D	24 Hrs.				30 : 1					/ A				
Testing Method (pitot, back pr.)	Tubing Pressure (Shut-in)			Casing I	Casing Pressure (Shut-in)					Choke Size				
Back Pressure	.1	2850		_		00			1	0/64				
VI. OPERATOR CERTIFIC					(	DIL CO	NSF	RV	MOITA	DIV	'ISIC	N		
I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above							. 10		JAN 2					
is true and complete to the best of my knowledge and belief.						Approv	ed _							
K. G. 1029											» į ,			
Signature Robert A Jones Engineer					У_	_			ICNED E	37				
Robert A Jones Engineer Printed Name Title					MIKE WILLIAMS  Title SUPERVISOR, DISTRICT H									
01/19/93 Date	(505)		5905 one No.	'	ILIG	Digital .			non-specific \$1.					

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.







**Job separation sheet** 

73 29 30 37 FOR APPROVED OMPO 1004-0137 Sizes December 31, 1991 Form 3160-4 UNITED STATES OF SUBMIT IN BUPLICATE. (October 1990) Expires December 31, 1991
5. LEASE INSIGNATION AND RESIAL DEPARTMENT OF THE INTERIOR structions on BUREAU OF LAND MANAGEMENTIA, HM 88210 Peverse side) NM-05**\$**2371 WELL COMPLETION OR RECOMPLETION REPORT AND LOGS ALLOTTEE D 1a. TYPE OF WELL: 7. UNIT AGREGMENT NAM WELL X ÖZGI Other CATA RS L TYPE OF COMPLETION: 8. FARM OR LEASE NAME LE NO. WORK OVER DEEP-WELL 2. NAME OF OPERATOR Chalk Bluff Fed. Comm. #3 9. API WELL NO. Mewbourne Oil Company 3. ADDRESS AND TELEPHONE NO. 30-015-27163 10. FIELD AND POOL, OR WILDCAT 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). <u>Illinois Camp Morrow</u> At surface SEC., T., R., M., OR BLOCK AND SURVEY OR AREA 1980' FSL & 990' FEL At top prod. interval reported below Sec. 1-T18S-R27E At total depth Same 12. COUNTY OR 13. STATE 14. PERMIT NO. DATE ISSUED Eddy 19. ELEV. CASINGHEAD 17. DATE COMPL. (Ready to prod.) 15. DATE SPUDDED 16. DATE T.D. REACHED 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* KB 3643' DF 3641' 11/24/92 01/06/93 3628 3628 22. IF MULTIPLE COMPL HOW MANY 21. PLUG, BACK T.D., MD & TVI CABLE TOOLS DRILLED BY 10, 150' 10, 102'

24. PRODUCING INTERVAL(S). OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* WAS DIRECTIONAL 25. 9950'-9954', 9957'-9972' Lower Morrow Orange Sand Yes 27. WAS WELL CORED 26. TYPE ELECTRIC AND OTHER LOGS BUN SDL-DSN Dual-Latero-MFSL-GR Sonic CBL No CASING RECORD (Report all strings set in well) 29 CASING SIZE/GRADE DEPTH SET (MD) HOLE SIZE TOP OF CEMENT, CEMENTING RECORD WEIGHT, LB./FT. AMOUNT PULLED 400 -13-3/8" 54.5# 17-1/2" 100 sx. Class None 9-5/8" 2,600' 12-1/4" 250 sx. 36# None 711 26 & 29# 8,968' 8-3/4" 1200 "C & H" None 29. LINER RECORD 30. TUBING RECORD PACKER SET (MD) DEPTH SET (MD) RIZE TOP (MD) BOTTOM (MD) SACKS CEMENT SCREEN (MD) SIZE 9972 4-1/2" 8600' 10.150' 200 sxs 2-7/8" 97971 None 2-3/8" 31. PERPORATION RECORD (Interval, size and number) ACID. SHOT. FRACTURE. CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED 9957'-9972' 9950'-9954' 9950'-9954' None None 4 SPF 19' 76 holes 33.\* PRODUCTION WELL STATUS (Producing or shut-in) DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) 01/16/93 Producing Flowing DATE OF TRET HOURS TESTED CHOKE BIZE PROD'N. FOR OIL-BBL. GAS-MCF. WATER-BBL. GAS-OIL BATIO 10/64" 01/16/93 24 50 2000 40 MCF/BBL PLOW. TUBING PI CASING PRESSURE CALCULATED 24-HOUR RATE OII,---BBI. GAS-MCF. WATER--HBL. OIL GRAVITY-API (CORR.) 2000 60 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY <u>Sold</u> Jones 35. LIST OF ATTACHMENTS

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

(Sittle 13 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the

TITLE

Engineer

ll available records

DATE \_01/21/93

\* Please hold in confidence

SIGNED \_

that the foregoing and attached information is con

SUMMARY OF POI drill-stein, tests, i recoveries):	ROUS ZONES: (Sacility of the Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial Colonial C	how all important : iterval tested, cus	SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stein, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):	38. GEOL	GEOLOGIC MARKERS	
FORMATION	тор	ВОТТОМ	DESCRIPTION, CONTENTS, ETC.		TOP	J.
Morrow	9950'	9972	Sandstone	MY Z	MEAS. DEPTH	TRUE VERT. DEPTH
; > - - -	) ) )			Yates	450'	
				7 Rivers	564	
				Óneen	1159'	
				Grayburg	1492'	
				San Andres	1985	
				Glorieta	3536'	
				Tubb	4760'	
	3 - 1544 -			Drinkard	5524	
	· 형 ·			Abo	5744	
				Wolfcamp	6474	
				Cisco	19897	
				Canyon	8440'	
				Strawn	8932	
				Atoka	9490	
				Morrow	9594'	
				Morrow Clastic	,0086 ၁	
				L. Morrow	9911	

Σ̈́



# RECEIVED P. D. BOX 1498 ROSWELL

P. D. BOX 1498 ROSWELL, NEW MEXICO 88202-1498

505/623-5070 ROSWELL, NM

505/746-2719 ARTESIA, NM

10 52 AM 193

AREA

CARL

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.

		<b>-</b>
400'	_	3/4°
887 '	_	1°
13591		1°
	_	-
1864'	-	2°
23361	_	1 1/2°
2600'	_	3/4°
_		1 1/4°
2792'	-	1 1/4
3086'	_	1°
3580'	_	1 1/3°
		40
4079'	-	1
43581	_	1 3/4°
	_	
4846'		2 3/4°

5033' 5096' 5158' 5222'	- - -	3° 3° 3	3/4° 1/4°
5283' 5346' 5409' 5464' 5555' 5587' 5650' 5719'			3/4° 3/4° 1/4° 1/4° 1/4° 1/2°

5813' 5875' 5967' 6094' 6217' 6720' 7213' 7685' 8155' 8654' 9003' 9509' 9837'		4° 4° 3 3/4° 3 1/4° 3 1/2° 3° 2 1/2° 2 1/4° 2° 1/4° 3/4° 1 3/4° TD
9837' 10150'	- -	3/4° 1 3/4° TD

W. Chappell Contracts Manager

STATE OF NEW MEXICO)

COUNTY OF CHAVES

The foregoing was acknowledged before me this O6th day of January 1993 by Gary W. Chappell.

MY COMMISSION EXPIRES

October 07,1996

NOTARY PUBLIFE

}	COMPANY UNIT:	:MEW8OURNE	OIL	LEASE SECTION	:CHALK BLU	JFF FED.CO	MWELL NO. TOWNSHIP:		1	Pc = 2273.2	Pc2 =	5167.4 *   *
	i :		Н	9961		: 1	G/GMIX			Pt2 = 5031.9	Pw =	2244.7 * ; ;
	%CO2 :	0.42	3N2		H2S			DATE		4810.1		2199.5 * ; ;
	ď:	2.278	Fr	0.012892	GH	: 8456.9		RANGE				2132.7 * ; ;
:::	:::::::::		::::::::::			::::::::	::::::::::		:::::::::::::::::::::::::::::::::::::::	4053.0		2055.4 * 11
									!	1		*!!
	V01 1 :	: 655	PSIA 1	2243.2			RESV.TEMP	173.6	!	Pc2-Pw2= 128.6	Pw2 =	5033.8 *
	VOL 2 :	1310	PSIA 2	: 2193.2						329.8		4837.6 *!!
	VOL 3 :	2283	PSIA 3	2113.2			SHUT-IN PR	2273.2	- i	618.9		4548.6 *
	VOL 4:	3294	PSIA 4	: 2013.2						942.6		4224.8 * ; ;
									;	 		* 1 1
				PCR	: 668					n =	0.884	* 1 1
				TCR	: 401				i 1	1		¥11
									!	Pc2/(Pc2-Pw2) =	40.184	
	LINE	RATE 1	! !	RATE 2	! #	RATE 3	1	RATE 4	1 1	t 1	15.66 <b>6</b>	*!!
		: 	 	I I	!	: !	 	 	! !	: 1 : ‡	8.350	<b>*</b> 11
	!	'1ST	'2ND	'ist	1 ''2ND	'ist	1 '2ND	¦ '1ST	1 2ND	1	5.482	* i i
	·	· ·	!	! !	!	 	1	! !	ii			· *!!
1	9M	0.655			•							*[[
2		534	•		•	534	534	534		[Pc2/Pc2-Pw2]n =		*!!
3		633.6					633.6	633.6			11.386	*[]
4		583.8						583.8			6.528	* <sup>1</sup> :
	PR (est)		•	•		3.16		3.01			4.500	<b>x</b> [ ]
5	Z(est)	0.727		0.727	0.736							x : !
		424.5										
	GH/TZ	19.924		19.918	19.691	19.391					14.915	*!!
8		2.111		•	•	2.108			•		14.903	*
7	l-e-S	0.526		•	•	0.526		0.525	0.525	1	14.823	<b>*</b> 1
10	Pt	2243.2					,					*11
	Pt2 /1000	•						4053.0				¥ 1 1
12									0.0128924			**** **** **** ****
		5.472										* ! !
14		3.58										*
	L/H(FcQm)											* ! !
									171.83059			<b>K</b>
17					4837.5							I 1 1
- 3					10123.1							<b>t</b> 11
19					3181.7	•	•	•				*!!
20			2743.3				2601.6	·-				# i !
21		4.12		4.03			3.89					x!!
22	Ţ.	1.45		1.46		1.45	1.45	1.46				£ , ;
23	-	3.753			0.735			0.730			1111 1122	
17:	::::::::::::::::::::::::::::::::::::::	::::::::::::::::::::::::::::::::::::::	::::: <b>::::</b>	:::::::::	:::::::::::	:::::::::::	::::::::::::::::::::::::::::::::::::::	:::::::::::::::::::::::::::::::::::::::	:::::::::::::::::::::::::::::::::::::::		:::: <b>:::::</b>	<b>:::</b> ::::::



## **Laboratory Services**

1331 Tasker Drive Hobbs, New Mexico 88240

Telephone: (505) 397-3713

Mewbourne Oil Co.

Attention: Mr. R.Jones

P. O. Box 5270

Hobbs, New Mexico 88210

SAMPLE

IDENTIFICATION: Chalk sluff #3 Mewebourne Oil Co.

COMPANY:

LEASE: PLANT:

SAMPLE DATA: DATE SAMPLED:

ANALYSIS DATE:

03-05-93

530.0

3/4/93 12:30PM GAS (XX)

SAMPLED BY: ANALYSIS BY: LIQUID ( ) R. Jones

Rolland Perry

PRESSURE - PSIG SAMPLE TEMP. °F

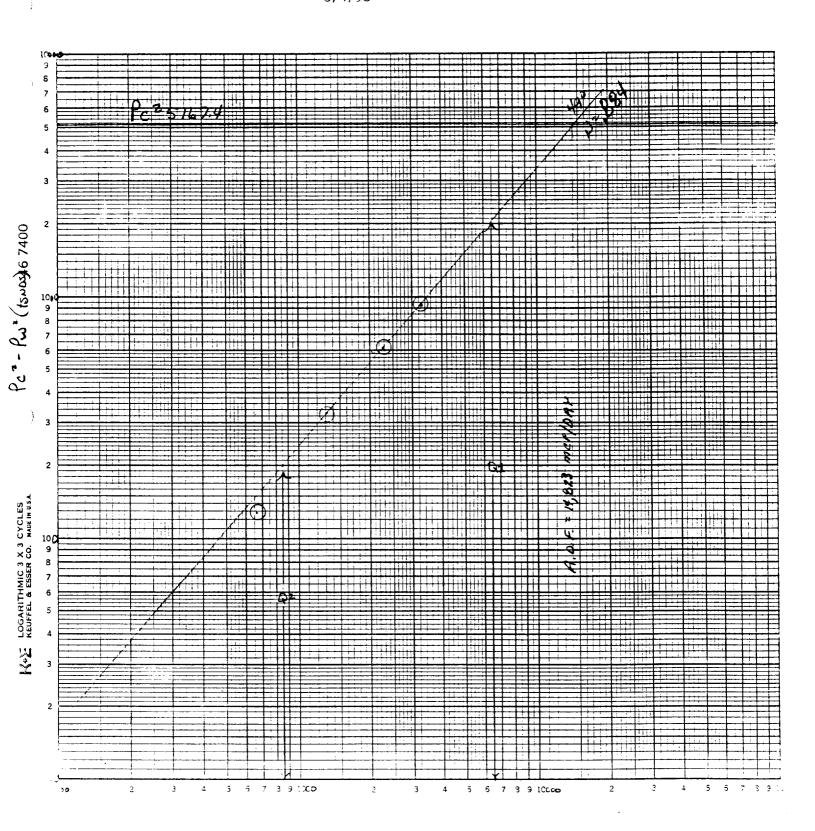
ATMOS. TEMP. °F

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	(105)	0.39	0.140	
N-Pentane	(NQ5)	0.41	0.147	
Hexane	(C6)	2.81	1.214	
Heptanes Plus	(C7+)	0.00	0.000	
·	•	100.00	4.927	
DT11/01/ET 00/01/		1269	MOLECULAR WT.	21.1701
BTU/CU.FT DRY			WOLECOLAR WI.	6111102
AT 14.650 DRY		1265	26# GASOLINE -	1.591
AT 14.650 WET		1239	26# GASOLINE 4	1.371
AT 15.025 DRY		1298		
AT 15.025 WET		1304	•	
SPECIFIC GRAVITA CALCULATEI MEASUREI	D	0.731		·

MEWBOURNE OIL COMPANY Chalk Bluff Federal Com. Well #3 1-18S-27E Eddy County, New Mexico 3/4/93



Omer/Our

Lag - 0. 20 - 20 - 20 - 3.81291 Lag - 10 - 20 20 1004 = 2.92942 Submit in duplicate to appropriate district office 33 See Rule 401% Rule 1122

# State of New Mexico Energy, Minerals and Natural Resources Department

Olst le

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 C	IL COMPANY			Lease	or Unit Name CHALK BLI	JFF FEDERAL	COM.	
Type Test X Initial		Special		Test		Well No		
	Annual Total Depth	Plug Ba	ck TD	Eleva		Unit Li	r Sec TW	P - Rge.
1/16/93	10150	10	102	4	GL 3628'	Т		8S 27E
Csg. Size Wt.	Set At	Perforati	ions:			County		J. 2
$4\frac{1}{2}$ 10.5	4.052 10	00 150 From:	9950	To:	9954	H	EDDY	
Tbg. Size7/8 Wt. 7 &				10.	<del></del>	Pool		DOLL
2 3/8 & 6.5		72	0057	_	0072	,		ROW
Type Well - Single - Bradenhes			9957 Packer Set	To:	9972	Formati		INOIS Comp
sübgke		•	1 acate oct	ີ 9 <b>79</b> 7			ORROW	
Producing Thru Reservoir T	emp. °F Mean Annua	al Temp. ºF	Baro, Press	-P <sub>•</sub> 13.2		Conne	ction answester	m
· · · · · · · · · · · · · · · · · · ·	Gg 721 % CO.		N <sub>2</sub>	% H,S	Prover	Meter F		Taps
9950 <sup>H</sup> 9950	.731	2 .42	.33	~ II <sub>2</sub> 3	Tiover	3.0	)68 	flg.
FL	OW DATA			TUBIN	IG DATA	CASING	DATA	Duration
NO Prover Orifice	Press.	Diff.	Temp.	Press.	Temp.	Press.	Temp.	of
NO. Line X Size Size	p.s.i.g.	h <sub>w</sub>	ak rambr	p.s.i.g.	oF.	p.s.i.g.	°F	Flow
SI SIZE				2260		Pkr.		48 hr.
1. 3 X 1.500	530	5	148	2230		1,71		1 hr.
2. 3 X 1.500	530	19	124	2180		10		1 hr.
3. 3 X 1.500	535	52	88	2100		19		1 hr.
4. 3 X 1.500	540	102	70	2000		17		1 hr.
5.								
				ALCULATIO		7		
NO. (24 HOUR)	h <sub>w</sub> P <sub>m</sub>	Pressure P <sub>m</sub>	1	Temp. or Ft.	Gravity Factor Fg.	Super Compres		of Flow
NO. (24 HOUR) 1. 11.13	52.12					Factor, F pv.		, Mcfd
1. 11.13 2. 11.13	101.59	543.2 543.2	.924		1.170	1.043	655	
3. 11.13	168.84	548.2	.943		$\frac{1.170}{1.170}$	1.049 1.066	1310 2283	
4. 11.13	237.54	553.2	.990		$\frac{1.170}{1.170}$	1.075	3294	
5.		7,5,2	• 550	, <u>, , , , , , , , , , , , , , , , , , ,</u>	1.170	1.075	3235	
P Tamp 9	R T <sub>r</sub>	Z Ga	as Liquid Hydro	carbon Ratio	23.6	- <del></del>		Mcf/bbl.
NO.				Liquid Hydroc		57.0		Deg.
181 608	1.52	.919	-	Separator Gas_		// <b>I</b> V	XXXX	XXXXX
281 584 382 548	1.46	.909		Flowing Fluid _		xxxxx		fix .849
382 548 483 530	1.37	.000	ritical Pressure	668		P.S.	LA. 662	P.S.LA.
5. J30	1.32	.865 Cr	ritical Tempera	шrе4	01		R 441	R
P <sub>c</sub> 2273.2 P <sub>c</sub> 2	5167.4				• • • • • • • • • • • • • • • • • • • •			
		n2 n2 1	1) P <sub>c</sub> <sup>2</sup>	= 5.4	821	(2) <b>P P</b> <sup>2</sup>	<b>n</b> =	4.500
NO. Pt Pw	P <sub>w</sub> <sup>2</sup>	rc w				$\frac{c}{D^2}$	2	
1. 5031.9 2244		128.6	$P_c^2 - P_w$	•		L Pc Pv	· ]	
2. 4810.1 2199		329.8	405 0	<b>=</b> 52	<b>a</b> n 1/	4 823		
3. 4465.6 2132		<u> </u>	AOF = Q	P.*	= <u></u>	7,023		
4. 4053.9 2055	.4 4224.8	942.6		$P_c^2 - P_c$	w <sup>2</sup> ]			
5.	1			<del>-</del>	-			201
Absolute Open Flow 14,	823	Mc	fd @ 15.025	Angle of S	lope 0 <u>49</u>		Slope, n	384
13.3 BBLS	CONDENSATE	PRODUCED I	JURING TH	ST				
Remarks: 13.3 BBLS	COMPENDATE	I KODOOLD I	JULIANO II	<u> </u>				
				·				
Approved By Division	Conducted	Bv:		Calculated By:		Check	ed By:	

## THI NESTERN COMPANIA COMPANIA MERICA

### WATER ANALYSIS

HOBBE, NEW MEXICO LAB

ANALYSIS #: HE010251

#### GENERAL INFORMATION

OPERATOR: Mewbourne Oil Company

DEPTH:

WELL:

Chalk Bluff Fed #3

DATE SAMPLED:

DATE RECEIVED:02/24/93

FIELD: 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:

70 °F 1.003 @

PH: 6.75

RESISTIVITY (MEASURED): 3

OHMS @ O °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

**BODIUM+POTASS:** 

1243 PPM

TOT. DISSOLVED SOLIDS:

3474 PPM

KCL

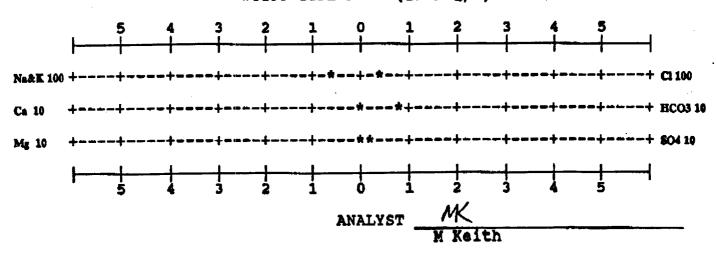
:no trace

OIL

:none

REMARKS:

#### STIFF TYPE PLOT (IN MEQ/L)



05F

Form 3160 5 (June 1990

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Drawer DD Artesia NM Sec10 FORM APPROVE:

Budget Bureau No. 1064-0000

Expires: March 31, 1990

	Expires:			
Pace	Designat	ion and	Cori.	`

Lease Designation and Se

MM_	0557371	
141.1-	0001011	

Do not use this form for proposals to dr	AND REPORTS ON WELLS ill or to deepen or ready to a different reservoir. R 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 Well Other		8. Well Name and No.
2. Name of Operator  Mewbourne Oil Company	MENTIVEO	Chalk Bluff Fed. Com. #3  9. API Well No.
3. Address and Telephone No. P.O. Box 5270 Hobbs, New Me	exico 88241 APR 2 6 1993	30-015-27163  10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey D		N. Illinois Camp Morrow 11. County or Parish, State
1980' FSL & <del>1980</del> ' FEL Sec. 1-T18S-R27E	, , , , , , , , , , , , , , , , , , ,	Eddy Co., N.M.
12. CHECK APPROPRIATE BOX	(s) TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	Abandonment Recompletion Plugging Back	Change of Plans  New Construction  Non-Routine Fracturing
Subsequent Report  Final Abandonment Notice	Casing Repair Altering Casing Other	Water Shut-Off Conversion to Injection 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 There There are a second to the second the second to the second the second to the second the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to the second to	Title _	Production Engineer	Date	larch 4, 1993
(This space for Federal or State office use)  Approved by (ORIG. SGD.) DAVID R. GLASS	Title _	PETROLEUM ENGINE <b>ER</b>	Date	4/22/93
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.

COMPANY	:MEWBOURNE	OIL	LEASE	:CHALK BL	UFF FED.CO	MWELL NO.	: 3			Pc2 =	5167.4 *
UNIT :			SECTION	: 1		TOWNSHIP	: 19		i		*1
l:		H	9961	L/H	: 1	G/GMIX	: 0.849	į.	Pt2 = 5031.9	₽w =	2244.7 *
%CO2 :		%N2		H2S			DATE		4810.1		2199.5 *
d :		Fr	:0.012892	GH	<b>:</b> 8456.9		RANGE	: 27 ;	4465.6		2132.7 *;
	:::::::::::	::::::::::	::::::::	::::::::			::::::::		4053.0		2055.4 *
									1		¥ 1
VOL 1 :	655	PSTA 1	: 2243.2			RESV.TEMP	173.6		Pc2-Pw2= 128.6	Pw2 =	
VOL 2 :			: 2193.2					i	329.8		4837.6 *
VOL 2 :			: 2113.2			SHUT-IN PR	= 2273.2	ì	418 0		4548.6 *
VOL 3 :			: 2013.2		•	J.,, C. 1	22,012		1 042 4		4224.8 *
VUL 4 :	3274	roin 4	. 2013.2						1.1		*
			PCR	: 668						0 884	*;
	*		TCR					<del>!</del>	: 1	V.004	*
			101	. 401				 	   Pc2/(Pc2-Pw2) =	40 194	*
	. 6475 (		I DATE D	1	NATE 7	ı	RATE 4	i !		15.666	" i • 1
LIME	RATE 1	i !	RATE 2	• 1	RATE 3	<b>!</b> <b>‡</b>	I THIL 4	!!!!		8.350	*
			1	!	15T	2ND	: '1ST	'2ND	· •	5.482	*
	'1ST	12ND	'1ST	112ND	151	ZNU	151		i i I I	3.482	
	! !	! 		1	1	0.007	7 204	i	ı <b>i</b>		*
1 9M	0.655	•	•	•	2.283					24 101	*
2 TW	534		•	•			•		[Pc2/Pc2-Pw2]n =		*;
3 Ts	633.6	•	•		•						* 1
4 T	583.8	•			•		•			6.528	* [
PR (est)			3.28						• •	4.500	*1
5	0.727			•	0.728	•	•				* !
6 TZ	424.5		*		•	•	•		¦ ADF= Q	17.148	*1
7 GH/TZ	19.924	19.629	19.918	19.691	19.891	*		•		14.915	*!
8 eS	2.111	2.088	2.110	2.093	2.108	2.099	2.104	•		14.903	*1
9 1-e-S	0.526	0.521	0.526	0.522			0.525	•		14.823	* ]
0 Pt	2243.2	-	2193.2	2193.2	2113.2	2113.2	2013.2	2013.2	14		*{
1 Pt2 /1000	5031.9	5031.9									*!
l2 Fr	0.012892			0.012892	0.012892	[0.012892	0.012892	[0.0128924	[ <del>t</del>   <i>t</i>		*!
3 Fc=FrTZ	•	•	•								* [
14 FcQm			7.17	7.25	12.51	12.59	18.11				* !
15 L/H(FcQm)	12.8	13.2	51.4	52.6							*!
16 Fw	6.761363				82.32401	82.97298	172.0865	171.83059	[ 1 f t		* t
17 Pw2	5038.7										* ;
18 Ps2		10519.8									* [
19 Ps	3261.4						•				*
20 P	2752.3										<b>≠</b> į
21 Pr	4.12	•		•	•						x;
22 Tr	1.46						•				*
23 I	0.738									ORM C122-	-D *
LU L	1 0.100	1 0.100	1 0.700	1 4.145	, 0,,00	1 -1.02	, ,,,,,,	, ,,,,,,		·	:::::::*

÷



# **Laboratory Services**

1331 Tasker Drive Hobbs, New Mexico 88240

Telephone: (505) 397-3713

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:

ANALYSIS DATE:

03-05-93

530.0

3/4/93 12:30PM GAS (XX) SAMPLED BY:

ANALYSIS BY:

LIQUID ( ) R. Jones

Rolland Perry

PRESSURE - PSIG

SAMPLE TEMP. °F

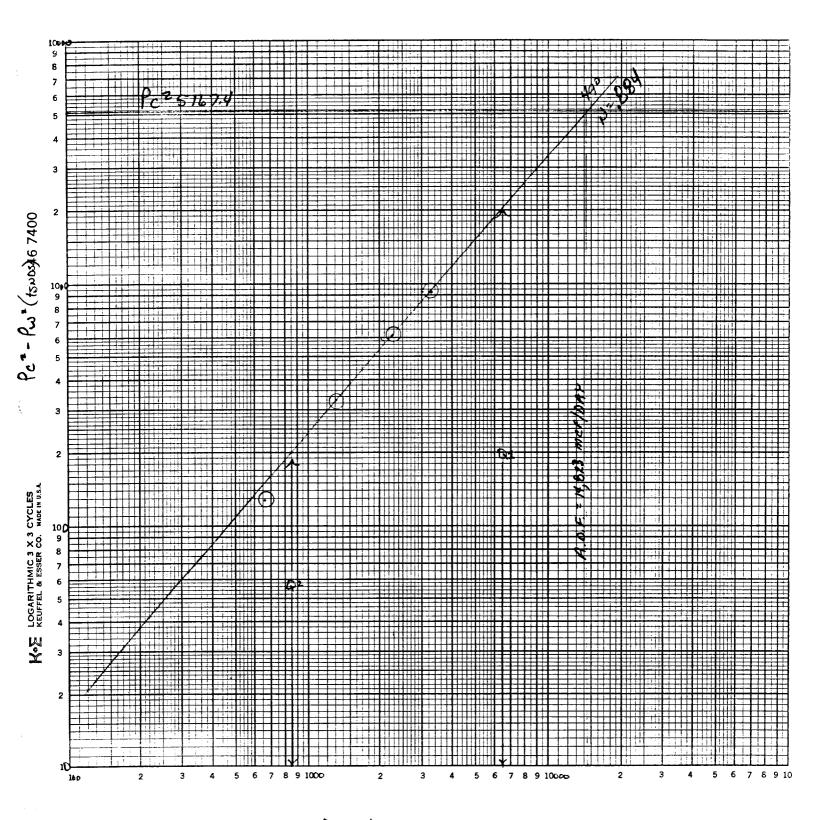
ATMOS, TEMP. °F

**REMARKS:** 

### **COMPONENT ANALYSIS**

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I-Butane	(IC4)	0.40	0.130	
N-Butane	(NC4)	0.86	0.270	
I-Pentane	(105)	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
	ı	1265		
*		**	26# GASOLINE -	1.591
		·		
AT 15.025 WET		1304		
SPECIFIC GRAVIT	Y <b>–</b>			
CALCULATE MEASURE	D	0.731		
SPECIFIC GRAVIT	D		26# GASOLINE -	1.59

MEWBOURNE OIL COMPANY
Chalk Bluff Federal Com. Well #3
1-18S-27E
Eddy County, New Mexico
3/4/93



Q MCF/DAY

Log Q1=6500:L09=3.81291

Log Qz = 850: Log = 2.92942

5lope N=,88349 = .884

Submit in duplicate to appropriate district office See Rule 401 & Rule 1122

#### State of New Mexico Energy, Minerals and Natural Resources Departments

Form C-122 RECEIVED Revised 4-1-91

#### OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

10R 0 8 1993

C. C. T.

#### MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL Lease or Unit Name Operator MEWVOURNE OIL COMPANY CHALK BLUFF FEDERAL COM. Test Date Well No. 3/4/93 X Initial \_ Special Annual Elevation Unit Ltr. - Sec. - TWP - Rge. Plug Back TD Completion Date Total Depth 10102 1/16/93 10150 GL 3628' County Perforations: Set At Csg. Size 3600 10150 10.5 4.052 9950 9954 EDDY From: Tbg. Size7/8 Pool Perforations: 1.91 MORROW 2 3/8 & 9972 6.5 2.441 9972 9957 NORTH ILLINOIS CAMP From: Type Well - Single - Bradenhead - G.G. or G.O. Multiple Formation Packer Set At 9797 MORROW súbgke Reservoir Temp. °F | Mean Annual Temp. °F Connection Baro, Press - P Producing Thru 13.2 Transwestern Taps flg. % CO₂ .42 Meter Run 3.068 % H,S Prover 9950 .33 9950 .731 **FLOW DATA TUBING DATA CASING DATA** Duration Diff. Orifice Prover of Press. Press. Temp. Temp. Press. Temp. NO. Line X Flow h\_ p.s.i.g. p.s.i.g. p.s.i.g. Size Size 2260 Pkr. 48 hr. SI 1 hr. 148 2230 3 X 1.500 530 1. 1 hr. 3 X 1.500 530 19 124 2180 2. 88 2100 1 hr. 3 X 1.500 535 52 3. 1 hr. 102 70 2000 540 4. 3 X 1.500 5. RATE OF FLOW CALCULATIONS Gravity Factor Rate of Flow Flow Temp. Super Compress. COEFFICIENT P<sub>m</sub> h<sub>w</sub>P<sub>m</sub> Factor Ft. Fg. Factor, F pv. Q, Mcfd NO. (24 HOUR) .9248 52.12 543.2 1.170 1.043 655 11.131. 101.59 11.131.170 543.2 .9436 1.049 1310 2. 168.84 11.13.9741 2283 548.2 1.1701.0663. 11.13237.54 3294 553.2 .9905 1.170 1.075 4. 5. 23.63 P, T, Z Mcf/bbl. Gas Liquid Hydrocarbon Ratio\_ Temp. º R NO. 57.0 A.P. L Gravity of Liquid Hydrocarbons\_ .52 919 .81 608 1. 731 <u>XXXXXXXX</u> Specific Gravity Separator Gas\_ 909 .81 584 1.46 2. G Mix .849 XXXXX Specific Gravity Flowing Fluid 548 .880 1.37 .82 3. 664 P.S.I.A. Critical Pressure P.S.J.A 865 .83 530 1.32 4. 401 441 Critical Temperature 5. 2273.2 5167.4 $P_c^2 - P_w^2$ P\_ 2 $P_{t}^{2}$ P\_\_ NO. 128.6 2244.7 5031.9 5038.8 4810.1 2199.5 4837.6 329<u>.8</u> 2. AOF = Q4465.6 2132.7 4548.6 618.9 3. 4053.9 2055.4 4224.8 942.6 4. 5. .884 14,823 Angle of Slope ⊖\_ Slope, n Mcfd @ 15.025 Absolute Open Flow 13.3 BBLS CONDENSATE PRODUCED DURING TEST Calculated By: Checked By: Approved By Division Conducted By: PRO WELL TESTERS KS KS

Form 3160-5 (June 1990)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

N.M. Oil . TS Division FORM APPROVED Budget Bureau No. 1004-0135

Expires: March 31, 1993

-9824	Designation	and	Serial	No.
	NM 05	573	71	

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
"A DDLICATION FOR DERMIT" for such proposals

SUBMIT IN TRIPLICATE

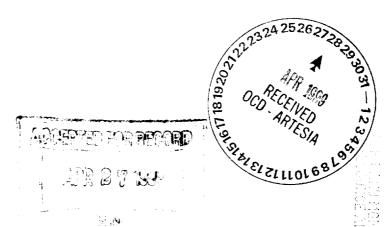
6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

<u></u>	Oil Gas Well Other		8. Well Name and No.  Chalk Bluff Fed. <del>Comm.</del> #3
	of Operator 1/ ourne Oil Company		9. API Well No.
	s and Telephone No.		30-015-27163
	Box 5270, Hobbs, NM 88241 505-393	3-5905	10. Field and Pool, or Exploratory Area
	n of Well (Footage, Sec., T., R., M., or Survey Desc	ription)	N. Illinois Camp Morrow
1980'	FSL & 990' FEL of Section 1, T18S, R2	7E	11. County or Parish, State
			Eddy
			,
12.	CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF NOTICE, REF	
12.	CHECK APPROPRIATE BOX(s)  TYPE OF SUBMISSION	TO INDICATE NATURE OF NOTICE, REF	PORT, OR OTHER DATA
12.			PORT, OR OTHER DATA
12.	TYPE OF SUBMISSION	TYPE OF A	PORT, OR OTHER DATA  ACTION  Change of Plans
12.	TYPE OF SUBMISSION  Notice of Intent	TYPE OF A  Abandonment  Recompletion  Plugging Back	PORT, OR OTHER DATA  ACTION  Change of Plans  New Construction  Non-Routine Fracturing

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'.



ORIG. SGD.) GARY GOURLEY

14. I hereby certify that the foregoing is true and correct Signed	Title	District Manager	Date	04/15/99
(This space for ederator State office use)  Approved by Conditions of approval, if any:	Title		Date	

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.

30-015-27163

**⊗ ESSELTE** 

MADE IN U.S.A.

NO. R753 1/3

R-9760 SD + NSL 11-4-92

1-21-93 Spectral Dimoity Dual Spaced Mustron 63651-84671 400'- 10,100'

Comp. Sonic Log.

Dual renduction Lateralg

Qual Lat. 63651-84671 8968'-10,143'

MSY Jamma Collar CBL Log 1340' - 10,069'

NSL- R-9760



## NAVAJO REFINING COMPANY Map ID No. S∃ Artificial Penetration Review

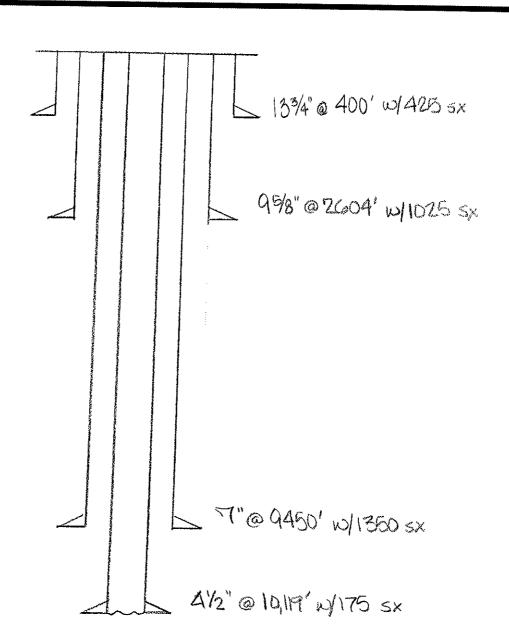
OPERATOR Navajo Refining Co.  LEASE WDW LOCATION Sec. 6 -T18S-R27E  WELL NUMBER 3 MUD FILLED BOREHOLE NA  DRILLED 12-22-90 TOP OF INJECTION ZONE 7319'  PLUGGED NA API NO. 30-015- 26575	
REMARKS: Calc. Top of Cement benind 7"@384'  133/4"@400' w/425 sx  95/8"@2604' w/1025 sx	
7"@9450' W/1350 sx 41/2"@10,119'W/175 sx	



NAVAJO REFINING COMPANY, L.L.C. Map ID No.  $Q(\rho)$  Artificial Penetration Review

OPERATOR Navajo Refining Co.	STATUS Active
LEASE WDW 0	LOCATION Sec. 6-TIS-R27E
WELL NUMBER 3	MUD FILLED BOREHOLE
DRILLED NA	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. C.. Cons. Division
FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

Artesia, NM 88210-2834tion and Serial No.

SUMPRY NOTICE	TO AND DEPOSITO ON LINE I	NM-0557371
Do not use this form for proposals to o	S AND REPORTS ON WELLS  drill or to deepen or reentry to a different reserve FOR PERMIT-" for such proposals	6. If Indian, Allottee or Tribe Name
SUBMI	T IN TRIPLICATE	7. If Unit or CA, Agreement Designation
. Type of Well	··	
Oil Gas Well ☐ Well ※ Other		8. Well Name and No.
Name of Operator		Chalk Bluff Federal Comm #1
Mewbourne Oil Com[any Address and Telephone No.		9. API Well No.
PO Box 5270, Hobbs, NM 505-393-5905		30-015-26575
Location of Well (Footage, Sec., T., R., M., or Survey D	Description)	10. Field and Pool, or Exploratory Area
		N. Illinois Camp Morrow
790' FSL & 2250' FWL, Sec.1 T-18S R-27E		11. County or Parish, State
		Eddy, NM
CHECK APPROPRIATE BOX(	(s) TO INDICATE NATURE OF NOTICE, REPORT	, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	N
Notice of Intent	Abandonment	Change of Plans
ann.	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
grown	Casing Repair	Water Shut-Off
[_] Final Abandonment Notice	Altering Casing	Conversion to Injection
	Para and a second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	<u></u>
	X Other MIT	Dispose Water
The above caption well was successfully Mil	state all pertinet details, and give pertinent dates, including estimated da sured and true vertical depths for all markders and zones pertinent to th	Dispose Water (Note: Report results of multiple completion on West Completion or Recomplation Report and Log form.) ate of starting any proposed work. If well is nis work.)*
B. Describe Proposed or Completed Operations (Clearly directionally drilled, give subsurface locations and mea  The above caption well was successfully MIT  The pressure chart is enclosed.  If any question, please call.	state all pertinet details, and give pertinent dates, including estimated dates and true vertical depths for all markders and zones pertinent to the T'ed on 10/25/2000. (500 psi for 30 min.)	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)  ate of starting any proposed work. If well is nis work.)*
The above caption well was successfully Mil The pressure chart is enclosed.	state all pertinet details, and give pertinent dates, including estimated dates and true vertical depths for all markders and zones pertinent to the T'ed on 10/25/2000. (500 psi for 30 min.)	(Note: Report results of multiple completion on West Completion or Recomplation Report and Log form.)
The above caption well was successfully MIT The pressure chart is enclosed. If any question, please call.  I hereby certify that the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and correct gned with the foregoing is true and	state all pertinet details, and give pertinent dates, including estimated dates and true vertical depths for all markders and zones pertinent to the T'ed on 10/25/2000. (500 psi for 30 min.)  ACCEPTED FOR RECORD NOV 1.5 2000  BLM  Title N.M. Young District Manager	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)  ate of starting any proposed work. If well is nis work,)*
The above caption well was successfully MiThe pressure chart is enclosed.  If any question, please call.  I hereby certify that the foregoing is true and correct med	state all pertinet details, and give pertinent dates, including estimated dates and true vertical depths for all markders and zones pertinent to the Tred on 10/25/2000. (500 psi for 30 min.)  ACCEPTED FOR RECORD  NOV 1.5 2000  BLM	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)  ate of starting any proposed work. If well is his work.)*  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **COD**-ARTESIA**  **C

2250 FWL ATE ENDICA NIM NIM 0557371 Mark Town Chalk Bluff FEO #1

RECEIVED

Form 3160-5 (Jene 1990)

#### UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

1991 U X NUL;

FORM APPROVED Budget Bureau No. 1004-0135

Expires: March 31, 1993

5. Lease Designation and Serial No. O. C. U. NM-0557371 ARTESIA, OFFICE 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 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE 1. Type of Well Oil S Well Other 8. Well Name and No. 2. Name of Operator CHALK BLUFF FED. COM #1 Mewbourne Oil Company 9. API Well No. 3. Address and Telephone No. 30-015-26575 P. O. Box 7698, Tyler, Texas 75711 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) No. Illinois Camp Morrow 2250' FWL & 790' FSL of Sec. 1, T18S-R27E 11. County or Parish, State Eddy, New Mexico CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12, 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 Momer\_Tracture Treat Dispose Water (Note. Report results of multiple completion on Well 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<sub>2</sub>/N<sub>2</sub> 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** 

I hereby certify that the furgoing is seen of		CHILDDAD, NEW MEXICO
. I hereby certify that the typegoing is strong whit sources  Signed May Many 1000	Title Engr. Oprns. Secretary	Date 5/21/91
(This space for Federal or State office use) Approved by Conditions of approval, if any:	Title	Date

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.

NM OIL CONS COMMISSION Drawer DD Artesia, NM APROVED **UNITED STATES** Form 3160-5 Budget Bureau No. 1004-0135 (June 1990) DEPARTMENT OF THE INTERIOR Expires: March 31, 1993 BUREAU OF LAND MANAGEMENT 5. Lease Designation and Serial No. NM-0557371 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name 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 FER 2 1 1994 1. Type of Well Oil Gas Well Well 8. Well Name and No. Chalk Bluff Fed. Com. #1 2. Name of Operator 9. API Well No. Mewbourne Oil Company 30-015-26575 3. Address and Telephone No. 10. Field and Pool, or Exploratory Area P.O. Box 5270 Hobbs, New Mexico (505) 393-5905 88241 N. Illinois Camp 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 11. County or Parish, State 2250' FWL & 790' FSL Sec. 1-T18S-R27E Eddy Co., N.M. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12 TYPE OF ACTION TYPE OF SUBMISSION Notice of Intent Abandonment Change of Plans Recompletion **New Construction** \_\_\_ Subsequent Report Plugging Back Non-Routine Fracturing Water Shut-Off Casing Repair Final Abandonment Notice Altering Cosing Other Shut-In-Status Conversion to Injection 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\_ Tide Petroleum Engineer

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

PETROLEUM ENGINEE

(This space for Federal or State office

Approved b(ORIG SCD.) JOE Q. LAW

\*See Instruction(文字形成形成形成形形) MEXICO

п 3160-5

# **UNITED STATES**

FORM APPROVED

; 199 <b>0)</b>		NT OF THE INTERIOR LAND MANAGEMENT	Budget Bureau No. 1004-0135 Expires: March 31, 1993  5. Lease Designation and Serial No.
Do not use th	nis form for proposals to d	AND REPORTS ON WELLS rill or to deepen or reentry to a different reserve R PERMIT—" for such proposals	NM-0557371 6. If Indian, Allottee or Tribe Name
i. Type of Well	SUBMI	TIN TRIPLICATE 00T 19 1993	7. If Unit or CA, Agreement Designation
Oil Well X  2. Name of Operator	/	\$ ( D.	8. Well Name and No.  Chalk Bluff Fed. Com. #1
3. Address and Telepi	e Oil Company / home No. 5270 Hobbs, New Mo	exico 88241 (505) 393-5905	9. API Well No.  30-015-26575  10. Field and Pool, or Exploratory Area
4. Location of Well (	Footage, Sec., T., R., M., or Survey I	escription)	N. Illinois Camp 11. County or Parish, State
		s) TO INDICATE NATURE OF NOTICE, REF	Eddy Co., N.M.
TYPE	OF SUBMISSION	TYPE OF ACTION	ON
Sul		Abandonment    Abandonment	Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off  Conversion to Injection  Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)  arting any proposed work. If well is directionally drilled,
-	3 Abandon Morrow Pe	erfs 9861 - 9967	
		)' - cover w/35' cement.	
	- Recomplete in (	Cisco Formation - Test & evaluate.	
	·	recomplete in Wolfcamp - Test & ev	SEP 22 10 wa 111 '93  CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1. CAREA 1.
4. I hereby certify the	4.1025	Petroleum Engineer	09/07/93
(This space for Fede	eral or Sighe diffice use) ORIG. SGD.) JOE G. L. val. if any:	ARA Tide PETROLEUM ENGINEEN	Date 10/15/93

RECEIVED Corn: 3160-5 UNITED STATES FORM APPROVED inc 1990) Budger Hureau No. 1004-0135 SEP 2 8 1992 DEPARTMENT OF THE INTERIOR Expires: March 31, 1993 **BUREAU OF LAND MANAGEMENT** 5. Lease Designation and Serial No. NM-0557371 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allonce or Tribe Name 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 Other 8. Well Name and No. 2. Name of Operator Chalk Bluff Fed.Com.#1 Mewbourne Oil Company 9. API Well No. 3. Address and Telephone No. 30-015-26575 P. O. Box 7698, Tyler, Texas 75711 (903) 561-2900 10. Field and Pool, or Exploratory Atea 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) N.Illinois Camp-Mor.-Gas 11. County or Parish, State 2250' FWL & 790' FSL Sec. 1, T18S-R27E Eddy CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. 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 Additional perfs. Dispose Water (Note. Report results of multiple completion on Well acidize & frac 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 the 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 the to 8000#. 8/21/92 - Continued testing the Set pkr @ 9740.68 w/15 pts compression. Press annulus to 2000f. 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 fugegoing by true was

 $B > \mathbb{R}^{n}$ 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.

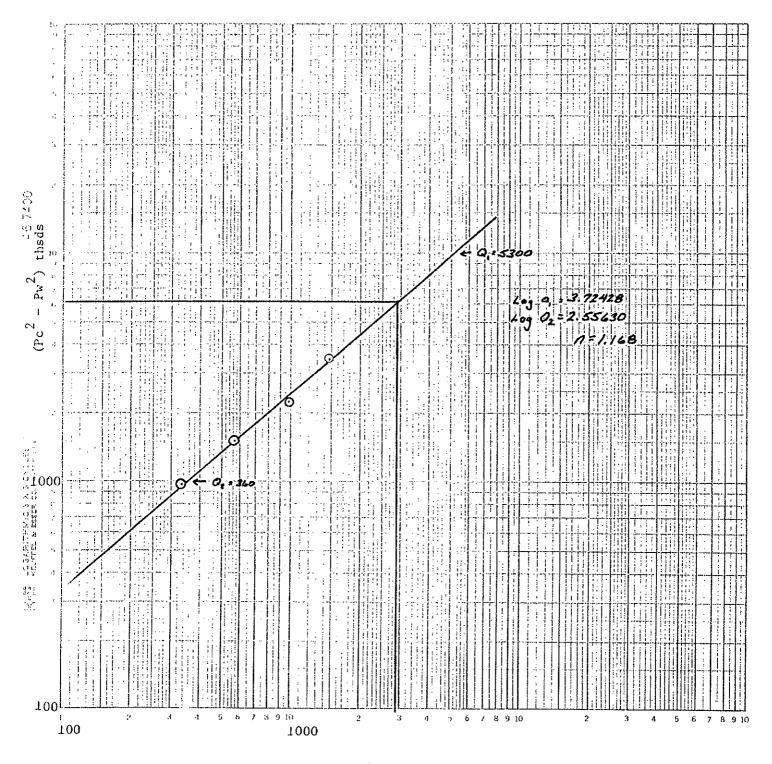
Title

Approved by Conditions of approval, if any:

Title Engr. Oprns. Secretary

9/11/92

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Q MCF/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

Chalk Bluff

IDENTIFICATION: Federal #1

COMPANY:

Mewbourne Oil Co.

LEASE: PLANT:

SAMPLE DATA: DATE SAMPLED:

ANALYSIS DATE: 03-18-91

PRESSURE - PSIG SAMPLE TEMP. °F

ATMOS. TEMP. °F

03-15-91

460.00

51.00

GAS (XX)

SAMPLED BY:

LIQUID ( )

ANALYSIS BY:

Gregory Milner Rolland Perry

**REMARKS:** 

#### **COMPONENT ANALYSIS**

		MOL		
COMPONENT		PERCENT	GPM	
Oxygen	(02)			
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	•	2256	MOLEOURADAM	
AT 14.650 DRY		1156	MOLECULAR WT	19.0972
AT 14.650 WET		1153	OCH CACOLINE	
AT 15.025 DRY		1133 1182	26# GASOLINE -	0.578
AT 15.025 WET		1162		
71 10.020 WE		1102		
SPECIFIC GRAVITY	<i>′</i>			
CALCULATED	)	0.660		
MEASURED	)	0.000		

ND PRESSURES (Pc or ●) WORK SHEET FOR CALCULATION OF WEL.

Form C-122F Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE (Pf or TE)

3-18-91	
/ DATE	1
WELL NO	,
Chalk Bluff Far	•
LEASE	
Membering Dil LEASE	
- DMPANY	

. % H<sub>2</sub>S \_ -Range -% N<sub>2</sub>-% co2 < 43 SS Ta St Township Pcr 673 L/H 1.000 G .660 GH 6566 Section 6766 X . SCATION: Unit 6466

IN IN		-	7	თ	4	ហ	Ø	7	00
-	T <sub>w</sub> (W.H. •R)	532	535						
C4	T <sub>S</sub> (B.H. •R)	209	809						
m	$T=(\frac{T_W+T_S}{2})$	229	570						
4	Z (Est.)	008'	062.						
S	TZ	456.0	450.4						
φ	GH/TZ	14.399	865141						
7	e <sup>S</sup> (Table XIV)	1.716	1.727						
80	P <sub>f</sub> or €	6478	3249						
on.	P <sub>t</sub> <sup>2</sup> or 🗲	95501	10556						
01 .	$P_c^2 = P_f^2/e^s$ or $F_c$	6151.7	6151.7 6110.6						
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12	$p_{\pm}(\frac{P_W + P_S}{2}) \text{ or } (\frac{P_C + P_f}{2})$	2864.6	2860.5						
<u></u>	$P_{\rm f} = (P/P_{\rm Cf})$	4.26	4.25						
4	$T_{\rm r} = (T/T_{\rm cr})$	1.52	1,52						
35	Z (Table XI)	061.	.190						

One copy to be filled in District Office (Work copy acceptable)

IEAD PRESSURES (#5 or P.,) WORK SHEET FOR CALCULATION OF WE

Form C-1221 Adopted 9-1-65

	7
(ESSURE OF OF PS)	`
FROM KNOWN BOLLOM HOLE PRESSURE ON OF PS)	

-DATE 3-18-91 % H<sub>2</sub>S .% N2 · 42 -Range GH 6566 Per 673 Ter 374 1.00 G -660 %CO2 .43 - WELL NO. -8 Township \_\_\_ LEASE Chalk Bluff Fed. Section \_\_ L/H 6456 COMPANY . Mew bosene H LOCATION: Unit \_ 6466

LINE		<b>-</b> -	2	m	4	2	9	7	æ
-	T <sub>w</sub> (W.H. ∘R)	532	532	532	532	532	532	532	532
2	T <sub>S</sub> (B.H. •R)	809	809	209	809	809	809	209	809
m	$T=(\frac{\Gamma_W+T_S}{2})$	570	015	270	270	570	570	570	570
4	Z (Est.)	588'	, 783	. 783	186:	.781	. 780	082:	.792
Ŋ	TZ	476.0	446.5	446.5	445.1	445.2	444.8	444.6	451.7
9	GH/TZ	13.7%	H01.41	14.712	14.753	14.749	14.761	14.768	14.537
_	e <sup>S</sup> (Table XIV)	8677	1.736	1.736	1.739	1.739	1.739	1.240	1.725
ω	姜or Ps	2983	2983	2831	283)	2593	2593	2152	2)52
on.	Bor Ps2	8898.3	8898.3	8014.6	8014.6	6723.6	6723.6	4631.1	4631.1
2	$E_{\rm p} = P_{\rm t}^2/{\rm es} \text{ or } P_{\rm w}^2 = P_{\rm s}^2/{\rm es}$	5304.3	7.9215	7.9197	0.6097	3867.2	3865.5	2661.7	2684.9
=	₩ or P <sub>w</sub>	2303.1	72264.2	5.8412	2/46.9	2.9961	1.9961	1631.5	1638.6
12	$P_{\text{th}}(\frac{P_{\text{W}}+P_{\text{S}}}{2}) \text{ or } (\frac{P_{\text{C}}+P_{\text{I}}}{2})$	2643.1	7.5292	2489.8	2488.9	2279.8	2279.5	1891.7	1895.3
<u>13</u>	Pr = (P/Pcr)	3.93	3.90	3.70	3.70	3.39	5.39	2.81	2.82
2.	$T_{\Gamma} = (T/T_{ct})$	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1,52
72	Z (Table XI)	.783	783	181	181	.780	086.	.792	.792

One copy to be filled in District Office (Work copy acceptable)

COMPANY:

PRO WIRELINE

CLIENT:

MEWBOURNE DIL

GAUGE NUMBER:

12235

WELL NAME:

CHALK BLUFF

WELL NUMBER:

TEST NUMBER:

LOCATION:

TEST OPERATOR:

BURRELL

COMMENTS:

4 POINT FLOW TEST RAN AFTER 72 HOUR BUILD-UP

FOSITION

GAUGE SERIAL NUMBER

1 2

3

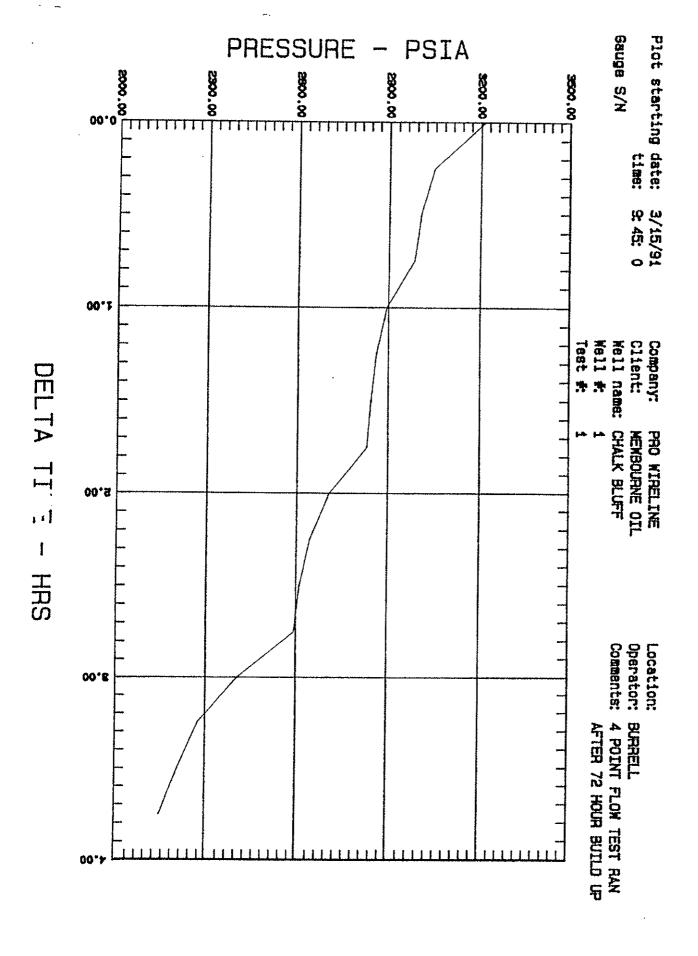
4

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	حرب وسال بينت هنده منت جديد منده منده منت بينت هنده منت بينت سند بينت بيند بينت بينت بينت بينت بينت حديد بينت بينت عدد منت جديد بينت منده منت بينت بينت عدد وحدة حديث بيناء سند بينت بينت بينت بينت بينت	ACT CATE
10: 0: 0	0.2500	3046.00	<b>3</b> 11	ART RATE 1
10:15: 0	0.5000	3003.00		
10:30: 0	0.7500	2983.00	CT	AFIT MANNE
10:45: 0	1.0000	2894.00	511	ART RATE 2
11: 0: 0	1.2500	2861.00		
11:15: 0	1.5000	2843.00		
11:30: 0	1.7500	2831.00	CT	
11:45: 0	2.0000	2707.00	511	ART RATE 3
12: 0: 0	2.2500	2643.00		
12:15: 0	2.5000	2610.00		
12:30: 0	2.7500	2593.00	1 <sup>10</sup> 0 mpc <sub>1</sub>	1 Pt. 400
12:45: 0	3.0000	2405.00	516	ART RATE 4
13: 0: 0	3.2500	2276.00		
13:15: 0	3.5000	2210.00		
13:30: 0	3.7500	2152.00	ENI	OF TEST



Form	3160	4
(Nove	mber	1983
(for	merly	9330

### UNITED STATES COMMESSIONIN DUPLICATE. (Secother In-

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

5.	LEASE	brsu	NAT	ÌÚN	AND	SERIAL.	N
	NM-	055	73	71	,		

		JREAU OF LA					rse side	5. LEASE DES NM-05	57371.
WELL CO	OMPLETION	OR RECO	OMPLETIO	N REPO	RT AN	ID LO	G*	G. IF INDIAN,	ALLOTTER OR TRESS NAME
1a. TYPE OF W	ELL: 00			Other _				7. I'NIT AGREE	EMENT NAME
b. TYPE OF CO	MPLETION:					1111	1/2		
WELL X	WORK BE	EP- PLUG BACK	DIFF. RESVA.	Other			· :n	S. FARM OR L.	
2. NAME OF OPER			·		1120	2000		1.	Bluff Federal Com
Mewbouri	ne Oil Con	npany V		<i>^</i>	14171	JL 23	1992	0. wri.t No.	
P. O. Bo	ж 7698, т	Tyler, Te	xas 7571	$_{.1}$	) ·	O. C. I	<b>5</b> .	10. FIELD AND	POOL, OR WILDCAT
4. LOCATION OF W	2250 FWI			h any State	requirem <b>a</b>	inden in	en/je		inois Camp Morrow
At top prod. 1	nterval reported be		101					OR AREA	
At total depth	Same							Sec. 1	-T18S-R27
			14. PERMIT			ISSUED		12. COUNTY OF	R 13, STATE
15. DATE SPUNDED	10. DATE T.D.	eracueni 17 na		30-015	1			Eddy	N.M.
12/22/90			07/91	iv prva.)	1			RT, OB, ETC.)*	19. ELEY, CASINGHEAD
20. TOTAL DEPTH. MI		JO, BACK T.D., MB	A 7V0   22, LP	MULTIPLE CO	<u>і ҚВ 3</u> мры,	3625 <b>',</b>	ERVALS	HOTARY TOOLS	S CABLE TOOLS
10,120'		.0,079'	•	W MANY*		19811	.1.60 HY	\ X	
24, PRODUCING INT				E (MD AND	• (av	<del></del>		······································	25. WAS DIRECTIONAL SURVEY MADE
9936-46'	, 9964-67	' - Morr	ow ·						Yes
6. TYPE ELECTRIC			······································					] 2	27. WAS WELL CORED
	DLL-MSFL	, DILL							No
CABING BIZE	WEIGHT, 18./		SING RECORD	Report all at	rings set i				
13-3/8"	54.50#			$\frac{7-1/2"}{7-1}$				RECORD	AMOUNT PULLED
9-5/8"	36#			$\frac{7}{2-1/4}$ "			- Ci		None
7 n	26# &			<del>2-1/4</del> 8-3/4"		1025 - 1350 -	<u>- Ci</u> - Ci		None
				<del>5 5/ 1</del>		1330	<u> </u>	10	None
29.		LINER RECORI	)		· · · · · · · · · · · · · · · · · · ·	30.	·····	TUBING RECOR	<u> </u>
8:2E	TOP (MD)	BOTTOM (MD)	SACKS CEMEN	r* SCREEN	(MD)	SIZE	T	DEPTH BET (MD)	PACKER SET (MD)
4-1/2"	9051'	10119'	175			2-3/	/8"	9805	9805
1. PERFORATION RE	conv (Interval, 2)	c and number)	1	32,	<u> </u>	ID SHOT	FD 4 C	TURE, CEMENT	COTTON TO THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PART
	, 9964-67				INTERVAL			***	OF MATERIAL USED
13', 2 S	PF, Total	28			-67				101 acid + 1000 s
					**************************************		bbl	N2 + 50  ba	11 sealers. Flush
							w/35	bbls 2% K	CL water + 1000
3.•							SCF/	bbl N2.	
ATE PIRST PRODUCT	TON PRODU	CTION METHOD (		RODUCTION , pumping—		pe of pum	p)	WELL ST	CATUR (Producing del)
			Flowi	ng				ohut-i	") Producing
3/11/91	24 hrs	CHOKE SIZE	PROD'N, POS	D	8 L.	ORSNC	۲.	WATER-BEL.	GASDIL BATIO
OW, TUBING PRESS.	CABING PRESSUR	8/64"	ОПВИІ,,	<u> </u>		886		0	896:1 m
1600#		24-HOUR RAY	'E }	1	а—мс <b>г</b> .	1	WATER~	-886. [.0]	IL GRAVITY-API (CORR.)
L DISPOSITION OF Q	AB (Sold, used for	fuel, vented, etc.)	<u> </u>		886		·····	O TEST WITHERSE	5800
'Sold									
5. LIST OF ATTACH	MENTS	··		·····		-	···	W.	TED FOR RECORD
Logs 6. I bereby fertify	····							1	SOS
signed	that the foregoing	and attached in						all available reco	PR 1 1991
STORES OF	*10			Engr. (				DAPE _	3/18/91
$\mathcal{U}$	.(2¢¢	Instructions a	nd Spaces for	Addition	al Data	on Rever	se Sid	<ul><li>)   CARLS </li></ul>	BAD, NEW MEXICO

Mare 300 Å	101	ictuaing depth ir.	iterval tested, cu	incidding depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and	38.	GEOLOGIC MARKERS	•
9961' 9967' Sandstone Yates 424' 9861' 9881' Sandstone Yates 424' 0uchen 1138' Crayburg 1464' San Andres 1976' Glorietta 3458' Tubb Drinkard 5376' Abo Canyon 8268' Strawn 8844' Morrow Clastics 9770' Barnett 10016'	FORKATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.			
1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989	Lower Mor	9936	12966	Sandstone	NAME	MEAS, DEPTH	TRUE
Queen       1138         Grayburg       1484         San Andres       1976         Glorietta       3458         Tubb       4451         Drinkard       5376         Abo       55794         Molfcamp       55794         Gloso       7666         Canyon       8368         Strawn       8444         Morrow       9454         Morrow       9454         Morrow       9454         Morrow       Barnett       10016	Middle Morbow	11986	. T.886	Sandstone	Yates	4241	
Grayburg   1484   San Andres   1976   Glorietta   3458   Tubb   4451   Drinkard   5376   Abo   5376   Abo   5376   Abo   5376   Abo   5376   Abo   5376   Abo   5376   Aborrow   5454   Morrow Clastics   9770   Barnett   10016	-				Oneen	1138	
San Andres 1976  Glorietta 3458  Tubb 4451  Drinkard 53761  Abo 57941  Wolfcamp 64201  Cisco 76601  Canyon 83681  Strawn 88441  Morrow Clastics 97701  Barnett 100161					Grayburg	1484'	
Glorietta 3458 Tubb 451 Drinkard 5376 Abo 5794 Wolfcamp 6420 Cisco 7666 Canyon 8368 8368 Strawn 8444 Morrow Clastics 9770 Barnett 10016				•	San Andres	19761	
Tubb 4451.  Drinkard 5376.  Abo (520)  Cisco (2anyon 8368.  Strawn 8844.  Morrow 9454.  Morrow Clastics 9770.  Barnett 10016.					Glorietta	34581	
Drinkard 5376' Abo	-				Tubb	4451	
Abo	<del>(1) - 1 - 1 - 1</del>				Drinkard	5376	
Wolfcamp 6420' Cisco 7666' Canyon 8368' Strawn 8844' Morrow Clastics 9770' Barnett 10016'					Abo	,•	
Canyon 8368' Strawn 8844' Morrow 9454' Morrow Clastics 9770' Barnett 10016'	` ,	_				9 20.	:. ,
Canyon 8368' Strawn 8844' Morrow 9454' Morrow Clastics 9770' Barnett 10016'					Cisco	19992	
Strawn 8844' Morrow 9454' Morrow Clastics 9770' Barnett 10016'	. *				Canyon		1!,
Morrow Clastics 9770' Barnett 10016'	·	-			Strawn		·
Morrow Clastids 9770' Barnett 10016'					Morrow	<del></del>	
	·				Morrow Clastic	9770 *	
					Barnett	100161	
	•						
						-	
	•						
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			<del></del>				
				•		•	
						<del></del>	



#### DRILLING CO., INC. - DIL WELL DRILLING CONTRACTORS

505/623-5070 ROSWELL, NM

P. D. BOX 1498 ROSWELL, NEW MEXICO 88202-1498 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 Vice-President

STATE OF NEW MEXICO)

COUNTY OF CHAVES

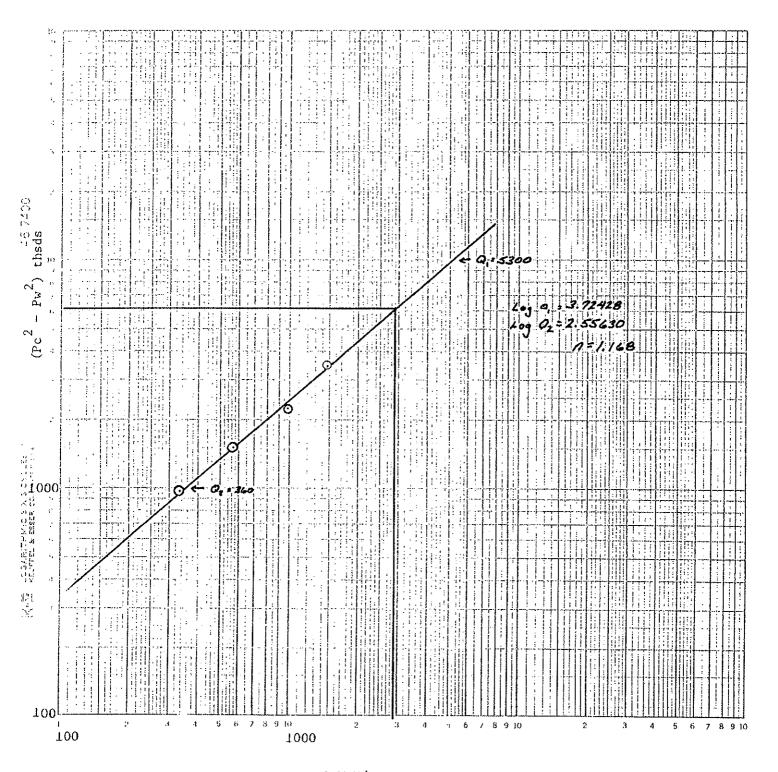
The foregoing was acknowledged before me this 05th day of February 1991 by Arnold Newkirk.

MY COMMISSION EXPIRES

October 07,1992

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL RECEIVED

T y p	e Yest										i'esi ()a							
	X	Initial	į	<u>. [</u>		unaj			Spec	ia!	03/1	5/91		- ld.		- 17		
Con	bar. A		***************************************			Course				R	č(Ce. v	i ii		Fi.F	11 5	1	45 A	1 '9
	Mewbour	ne Oi	L Com	pany V		Tra		ester	n	LAA	√ 79	1001	·	Unit C	A.c.			5 ) p
Foo	Und	esigna	ated	Mannarr		, etmos		Morro	W	MA	Y - 7	1331	'	À	REA:		:	5.5.5
	th Illi			MOTTOW Total Ciepth	l			ug Bock		1	O:v@v	Ð.		Farmo	r Lease	Name	<u></u>	
Com	pletion Date		- 1	•	0.1			10	075 <b>'</b>	ANT	ESIA, S	XFICE	.	Cha	Uk_RI	uf.f.	Fede	raL
200	3/05/91 5172"	Wi.		10.12	Set A	ī	Le	ricinilo	nas					Well No	3.			
2	1/2"	11.	.6#		10	,120	r	rom	9936'	To		9967	<u>'</u>	Unit	Sec.	Τ,	<b>vp.</b>	Roje.
The	. 51 f. o	Wi.	1	d	1		1	ottotolis		To					2001		•	1
	1// 6 1	O	اده		9	,805	'   '	rom	Open Pocker &			End		County			8S :	27E
Typ	e Well - Sing	le - Drad	enhead.	_G.G. or G.G	o, Mulli	(pie			Pucker Co				l		Edd	ls»		
	Single	e Cas	F)	olf Temp. °F	- 14	ano Ann	ual Te	mp. *F	Baro, Pro	980	5.* P_			State		<u>. y</u>		
1,100	ucing Thru Thg.			• 10,12	- 1		72		1	3.2			1	N	lew Me	xic	0	]
	<u>.                                     </u>	_ <del></del> _	140	Co		co,		% N <sub>2</sub>	I	k Has		Provet	1	Meter	Run	Τ	ape	
	9949		949	.660		. 4	3	-	. 42					<u> </u>	168		Flg.	
	7747			OW DATA		•	M		TUB	ing i	ATA		C.A	SING	DATA			noile
NO.	Piover	x	Orifice	Press.		Diff.	'	Temp.	Press		Tem •F	•	Prei p.e.i	_	Ten	-		1 ow
NO.	Line Sire		Sire	p.s.i.g.		h	_	•F	p.u.l.				p					Hr.
SI	S.T				_			<b>-</b> .	2380				DI.				1	Hr.
1.	3 X 1.			426_8_	-		4-	<u>51</u> 51	217: 2070				Pk Pk					Hr
2.	$3 \times 1$	125		446.8		<u> </u>		<u>ارد                                    </u>	1900				Plc				]	Hr.
3.	$\frac{3 \times 1}{3 \times 1}$			446.8 426.8		<u>3</u> 7		<u> </u>	160		]		Pk					Hr.
4.	3 X 1	1.4.7		420.0			=		1	·								
5.				<u> </u>		RATE	OF	FLOW	CALCUL	ATIC	NS							
			1			Press		Flo	w Temp.		Gravity	·		Super		Rat	of Flo	sw .
	Coeffic		-	√h <sub>w</sub> P <sub>m</sub>				F	actor		Factor	į		mpre#8. ior, Fpi	1	•	), McId	
NO.	(24 H	) )	<u> </u>			P <sub>m</sub>		ļ	Ft.		Fq						33	7
1	6.217		4	1.952 1.134			<u>40                                    </u>		.009 .009		1.225 1.225			048. <u> </u>			57	
2.	6.217					<u>_</u>	60	<del> </del>	.009	<del>                                     </del>	1.225			051			9.8	
3	6.217 6.217			7.989			40	7	.015		1.225			051			144	6
<u>4.</u> 5	0.41/		1	1.5.70.2														
		Temp	<u> </u>	т,	z	. 1	Gas L	iquid Hy	drocarbon i	Katio .		Dry	Gas				Мо	://bbl.
NO.	P <sub>r</sub>	Temp	. • •	·r					of Liquid									"Deg.
1	.65		511	1.37					ly Separato			.660			X.	X_X_3	XXX	<u> </u>
2.	.68		511	1.37					ity Flowing	_	73	<u>x x</u>	XXX	P.S.I		·····	P	SLA
3.	.68		511	1.37		1			eraturs	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	74			F .9.1	R			R
4.	65	<del> </del>	505	1.35	<del></del>	05	PHILL	er ramb	C. A(A) =									
5	2472	P. 2	6110.	 7	············			p 2		 ] .	784		Γ	P_ 2	٦n	1	.967	
P <sub>C</sub>		P.		P. <sup>2</sup>	P <sub>C</sub> 2	₽,2	(1)	n2	?			+	(2)	B2 - F	<del>,</del>   '	=		
1		22	64	5125		5.7		P.* - K	i				L	'¢ - 'V	الد '			
2		2.1		4609	150	1.7		r	2	٦n								
3		19		3865	224	5.7	AOF =	Q .	η <sub>2</sub> <sup>2</sup> η <sub>2</sub> <sup>2</sup> - η <sub>2</sub> <sup>2</sup>	-  -	2.8	344		•				
4		16	39	2686	3424	+•/-	•	L	5 5.	Ĺ.								
5	,	<u></u>				L		<u></u> -		T		<del></del>	,	,0			•	160
Abs	alute Open i	-low	2,	844		<del></del>		Meld	# 15.025	Angl	ol \$10	pe 6	4	10	s	lope,	<u>, l.</u>	LDQ
			made	0 551	f ].uí	a du	rino	tesi	-							·		<del> </del>
nem								•										·····
	orks:						<u></u>											
				Cardon	( Fi = .	•			Culculote	d Dv:				Check.	d By:			· · · · · · · · · · · · · · · · · · ·
	roved by Di		•	Conduct	ed By:	•			Culculate		Iner				d By: Pier			



#### **Laboratory Services**

1331 Tasker Drive Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR:

Mewbourne Oil Co.

Attention: Mr, Greg Milner

03-15-91

P. O. Box 5270

Hobbs, New Mexico 88241

SAMPLE

Chalk Bluff

IDENTIFICATION: Federal #1

COMPANY:

Mewbourne Oil Co.

LEASE: PLANT:

SAMPLE DATA: DATE SAMPLED:

ANALYSIS DATE: 03-18-91 460.00

PRESSURE - PSIG

SAMPLE TEMP. °F 51.00

ATMOS. TEMP. °F

GAS (XX)

LIQUID ( )

SAMPLED BY:

Gregory Milner

ANALYSIS BY:

Rolland Perry

**REMARKS:** 

#### COMPONENT ANALYSIS

		MOL		
COMPONENT		PERCENT	GРM	
Охудеп	(02)			
Hydrogen Sulfide	(H2S)			
Nitrogen	(N2)	0.42		
Carbon Dioxide	(CO2)	0.43		
Methane	(C1)	87.54		
Ethane	(C2)	7.07	1.885	
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		0 550		
MEASURED		0.660		
MICHOUNEL	,	0.000		
			*****	

WORK SHEET FOR CALCULATION OF WELL D PRESSURES (Pcor概)

Form C-122F Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE (Pf or理)

3-18-91 -DATE FEET WELL NO. -LEASE Cholk Bluff DMPANY MEWDOOMS OIL

% H<sub>2</sub>S \_ 17/1/2 .42 Range . -% N2-- 2003 - 43 88 Township \_\_\_ L/H 1,000 G 1660 Section 6766 I . SCATION: Unit 6466

GH 6566 Per 673 Ter 374

1 $T_{w}(W.H. \circ R)$ 2 $T_{S}(B.H. \circ R)$ 3 $T^{+}(\frac{T_{w} + T_{S}}{2})$ 4 $Z(Est.)$ 5 $TZ$ 6 $GH/TZ$ 7 $e^{S}(Table XIV)$ 8 $P_{I}$ or $\overline{E}$ 10 $P_{C}^{2} = P_{I}^{2}/e^{S}$ or $\overline{E}$ 11 $P_{C}$ or $\overline{E}$ 12 $P_{H}(P_{C})$ 13 $P_{I} = (P/P_{CI})$	-							
	•	8	ო	4	ហ	ဖ	7	œ
	532	532						
	209	809						
	870	570						
	008'	062.						
	0.954	450.4						
	14.399	14,578						
		1.727						
	3249	3249						
	95501	105.56						
	6151.7 6110.6	6110.6				·		
	2480.3	2472.0	» رم					
		2860.5						
		4.25						
	1,52	1.52						
15 Z (Table XI)	062"	.190						

One copy to be filed in District Office (Work copy acceptable)

WORK SHEET FOR CALCULATION OF WE. JEAD PRESSURES (#5 or P.,)

Form C-122h Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE ( or P.)

-DATE 3-18-91 -% N<sub>2</sub> · 42 Range 1.00 G 1660 % CO2 143 - WELL NO. -\_\_ Township \_\_\_ LEASE CHOIK BLUTH \_ Section \_\_ 6466 COMPANY . Mew bourne LOCATION: Unit \_ 6466

GH 6566 PCI 673 TCI 374

- L'H

% H<sub>2</sub>S \_

二 三 四			2	m	4	ß	9	7	8
-	T <sub>w</sub> (W.H. •R)	5.32	532	532	532	532	532	532	532
7	T <sub>S</sub> (B.H. °R)	809	809	209	809	809	809	209	809
m	$T=(\frac{Tw+Ts}{2})$	570	015	220	570	570	220	570	570
4	Z (Est.)	.835	, 783	. 783	186.	.781	.780	082.	.792
s	12	476.0	446.5	146.5	445.1	445.2	444.8	444.6	451.7
9	GH/TZ	13.7%	14.70H	14.712	14.753	14.749	14.761	14.768	14.537
_	e <sup>S</sup> (Table XIV)	817:1	1.736	1.736	1.739	1.739	1.739	1.740	1.725
60	費 or Ps	2983	2983	2831	283)	2593	2593	2152	2752
on.	<b>要</b> or Ps <sup>2</sup>	88983	8898.3	8014.6	80146	6723.6	6723.6	4631.1	4631.1
٤	$E_{\phi} = P_{1}^{2}/e^{5} \text{ or } P_{w}^{2} = P_{s}^{2}/e^{5}$	5304.3	5/26.6	4616.2	4609.0	3867.2	3865.5	2661.7	2684.9
=	or Pw	2303.1	2264.2	2148.5	2/4/6.9)	1966.5	1.996.1	1631.5	1638.6
12	$P_{\pm}(\frac{P_W+P_S}{2}) \text{ or } (\frac{P_C+P_f}{2})$	2643.1	7.5292	2489.8	2488.9	2279.8	2279.5	1891.7	1895.3
<u></u>	$P_{\rm f} = (P/P_{\rm cr})$	3.93	3.90	3.70	3.70	3.39	5.39	187	2.82
<u> </u>	$T_r = (T/T_{cr})$	1.52	1.52	1.52	1.52	75.7	1.52	1.52	1,52
Ť.	Z (Table XI)	,783	.782	181	182'	.780	086.	.792	.792

One copy to be filled 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

FOSITION

GAUGE SERIAL NUMBER

1

2

3

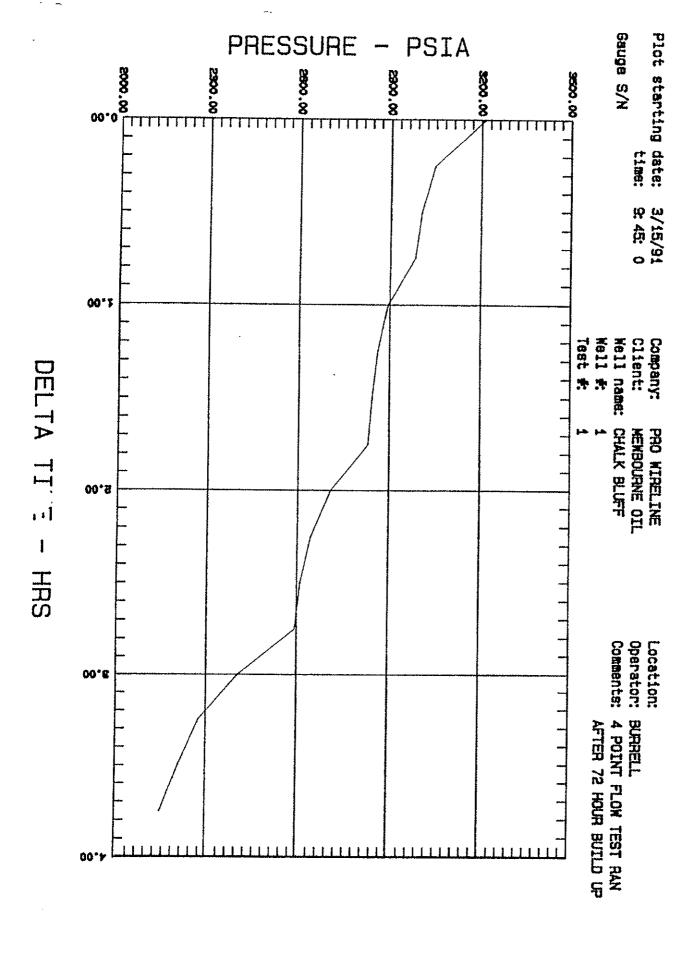
4

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	CTA	RT RATE 1
10: O: O	0.2500	3046.00	U I FI	A RESERVED.
10:15: 0	0.5000	3003.00		
10:30: 0	0.7500	2983.00	CTAI	RT RATE 2
10:45: 0	1.0000	2894.00	Sim	SI RHIE Z
11: 0: O	1.2500	2861.00		
11:15: 0	1.5000	2843.00		
11:30: 0	1.7500	2831.00	STAI	RT RATE 3
11:45: 0	2.0000	2707.00	D i m	() KMIC A
12: 0: 0	2.2500	2643.00		
12:15: 0	2.5000	2610.00		
12:30: O	2.7500	2593.00	CTA	T DATE 4
12:45: 0	3.0000	2405.00	D I Hr	RT RATE 4
13: 0: 0	3.2500	2276.00		
13:15: 0	3.5000	2210.00		
13:30: 0	3.7500	2152.00	END	OF TEST



#### RECEIVED

\*\*orm 3160-5 ne 1990)

UNITED STATES

FORM APPROVED

	NT OF THE INTERIOR SEP 2 8 1992 LAND MANAGEMENT	Expires: March 31, 1993
	Ö, C. D.	5. Lease Designation and Script No. NM-0557371
SUNDRY NOTICES	AND REPORTS ON WELLS	
Do not use this form for proposals to d	rill or to deepen or reentry to a different reservoir.	d. If Hallen, Atlonee of Tribe Name
Use "APPLICATION FO	OR PERMIT—" for such proposals	
SUBMI	T IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well		
Oil man Cas —		
2. Name of Operator		B. Well Name and No.
Mewbourne Oil Company		Chalk Bluff Fed.Com.#1 9. API Well No.
3. Address and Telephone No.		30-015-26575
P. 0. Box 7698, Tyler, Texas	75711 (903) 561–2900	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey E	Description)	N.Illinois Camp-MorGa
A4101		11. County or Parish, State
2250' FWL & 790' FSL Sec. 1,	T18S-R27E	Eddy
12. CHECK APPROPRIATE BOX	(s) TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	Abandonment	
	Recompletion	Change of Plans  New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
<u></u>	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	Other <u>Additional perfs</u> ,	Dispose Water
13. Describe Proposed or Countered Occasion (City)	acidize & frac	(Note: Repart results of multiple completion on Well Completion or Recompletion Report and Log form t
give subsurface locations and measured and true vertice	If pertinent details, and give pertinent dates, including estimated date of starting cal depths for all markers and zones pertinent to this work.)*	any proposed work. If well is directionally drilled,
	1-9882', 2 SPF, 10' Net, 22 holes.	
8/14/92 - Acidized w/3500 gale 7	17 UCI A additional 1 1000 partition	
sealers. Flushed w/27	12 HCL + additives + 1000 SCF/bbl nitr KCL wtr + 1000 SCF/bbl nitrogen. ISDP	ogen carrying 80 ball
10 mins 3400#, 15 mins	2800#. Avg rate 3.7 BPM, AP 5000#, Mg	4300f, 5 mins 3800f,
to pit 8/15 - 8/18/92.	My rate 3.7 bin, Ar 30007, Mr	. Joods. Blew well down
	tested the to 2000 Held OK. Removed	THE WAY THE
Swabbed well down to 5	300'.	tree. KU BOP. RU swab.
Tested the to 8000# 8	POOH w/tbg & pkr. TIH w/new pkr assem/21/92 - Continued testing tbg. Set pk	bly & 200 jts tbg.
compression. Press annu	ulus to 2000#. Held OK. Started swabbi	r e 9/40.08' w/15 pts
3/22/92 - RU Western Co. Acidiza	d perfs w/1500 gals 7½% HCL acid + add	ng. nad light blow of gas.
nitrogen + 35 ball seal	lers. Flushed w/2Z KCL wtr. ISDP 400#.	itives + 1000 scf/bbl
15 min 3600#. ATP 5100#	, MTP 5400#. RD Western. Opened well	3 min 3/00#, 10 min 3700#
THO SHOW OF RES OF OTT"	kecovering load.	
3/23/92 - RU swab. FL @ 7000'. Sw	vabbed dry in 3 runs. Continued swabbi	no Popovovino II
	James James Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines Lines	ng. recovering load.
14. I hereby creatly that the turegoing by true and correct		
- Cullow bank	From O	
(Thi) space for Federal or Sixte office use)	Tille Engr. Oprns. Secretary	Date9/11/92
Approved by	Asr	
Conditions of approval, if any:	Title	Date
	<i>I</i> 322	

Tale 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 talse, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

## UNITED STATES COMMISSIONIN DUPLICATE.

## DEPARTMENT OF WITHE INTERIOR

(Secother Instructions on reverse side)

Form approved.	
Budget Bureau No.	1004-0132
Expires August 31,	

		· · · · · · · · · · · · · · · · · · ·	 	
٠.		DESIGNATION		
	3.72.6	AEE7271		

		BUR	EAU OF LA	ndaran	agëme	-M9210				NM-0!	5573	171
WELL CO	OMPLE	TION	OR RECO	MPLET	ION	REPOR	T AN	ID LO	G*	G. IN INDIAN	I, ALLO	TTEE OR TRESS HAME
IR. TYPE OF WE		OH. WELL	[ GAS		***	Other			<del>_</del> _	7. PNIT AGE	EEMEN	r NAMB
b. TYPE OF CO		٧:				V/1001		1120	V.			
WELL X	WORK WORK	EN BEEL-	PLUG BACK	Dir	ien.	Other		acceler.	:D	S. PARM OR		
2. NAME OF OPER		Comp	V			-1	"E//	20		O. WELL NO.		ff Federal Cor
Mewbourn		COMP	any v			fo_	11/1/1	123	1997	2 1	7	
P. O. Bo	× 769	8, Ty	ler, Te	xas 75	5711	6		O. C. I	D.		1004 av	L, OR WILDCAT
4. LOCATION OF W	KI.L (Repo	rt location	clearly and in	accordance	e with ar	ny State re	quirem <b>a</b>	PROPERTY OF	REIČ.	170 -1.46		is Camp Morrow
			& 790' i	FSL						11. SEC., T., OR AREA		OR BLUCK AND BURYEY
At top pred. It	aterval rep	orted belov	W							Sec.	1-T1	8S-R27
At total depth	Sam	e		·	·	-						
					ON TIME	)-015-		ISSUED C		12. COUNTY PARISH	OR	13. STATE
DATE SPUBBED	16. DAT	E T.D. REA	CHED   17, DA	1			!			Eddy  B. HT. SB. ETC.)*	1 19 1	N.M.
12/22/90	1/	29/91	3/1	07/91			KB 3	6251,				,
O. TOTAL BEPTH, MO	A TVD			TVD 22	HOW X	TIPLE COM	PL.,	23. INT	ERVAL:	HOTARY TOD	1.8	CABLE TOOLS
10,120 I	20 VA1 / 0 )		.0791	l somman	N.M.S. /	ta D. I. Mar. and III			<del></del>	l X		
9936-46					MANIE (	KU AND TY	.,				25	SURVEY MADE
2230-40	, ,,,,,,,	<del>4</del> -07	- MOLIC	. W								Yes
TYPE ELECTRIC						***************************************				]	27 W	AS WELL CORRO
SDL-DSN,	-ייירת	MSFL,		1807 0 000		and all adul		211				No
CABING BIZE	WEIG	ПТ, LB./FT.				oort all stri N.R BIZE	nge set i		ENTIN	G RECORD	<sub>ī</sub>	AMOUNT PULLED
13-3/8"	I	.50#		100'	17-	1/2"		425	- C:	irc		None
9-5/8"	36			504	]	1/4"			- C			None
		# & 29	94	1501	8-	3/4"		<u> 1350 -</u>	<u>- C</u>	irc		None
		Li	NER RECORD		<u> </u>			30.		TUBING RECO	)RD	
8122	TOP (M	D) B	OTTOM (MD)	SACKS CE	MENT*	SCREEN	(MD)	\$12K		DEPTH BET (M		PACKER SET (MD)
4-1/2"	905	<u> L'</u>	0119'	17	5			2-3,	/8"	98051		9805
. PERFORATION RE	CORP (Inte	rval, size	and number)	!		32.	100	In suom	TO A	With the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of t		
9936-46	, 9964	<b>1-</b> 671					INTERVAL			TURE, CEMENT	<del></del>	
13', 2 SI	PF, To	tal 2	18			9936-	-67°					acid + 1000
						-			bbl	N2 + 50 b	all.	sealers. Flus
						ļ			w/3	5 bbls 2%	Keil	water + 1000
•						OUCTION		····		/bbl N2.		<del>2</del> 30
FE FIRST PRODUCT	TON -	PRODUCT	ON METHOD (/			impingsi	re and t	ipe of pun	p)	werr.	STATUS	(Producing of)
TE OF THET	HOURS 7	Eated	CHOKE BIZE	F'LC	wing	OIL-BBL		OKRAD		WATER—BEL	p	roducing
3/11/91	24 hr:	5	8/64"	TEST F		1	•	886	••	O ··	`   `	886:1 (7)
W. TUBING PRESS,	CABING 1	RESSCEE:	CALCULATED 24-HOUR BAT	011,8	Br	1	MCF.		WATER		<del></del>	AVITY-API (COME.)
1600#	10 10 11 11			1	·····		886			0	58	<u>9</u> .0
Sold	-0 10VIA, N	eea jor jue	o, ventea, elc.)							TEST WITNES	ard by	
LIST OF ATTACH	MENTA		· · · · · · · · · · · · · · · · · · ·			·	<del></del>			W.	- 17/ EAV	FOR RECORD
Logs		**************************************	<b></b>									
I hereby terrify	that the	oregoing	nd attached in	formation	is compl	ete and con	rrect as	determine	d fron	all aveilable re	Cords	SSS   1991
SIGNED MU	porce	DM	mpin	<u></u>	le <u>E</u>	ngr. Op	orns.	Secre	tary	DATE	APR 3/	18/91
' 0	ſ	*(See In	structions an	d Space	fer A	dditional	Data	on Reve	se Si	de) CARI	SBAL	, NEW MEXICO
_										. I (\mathbb{l}) 1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/		

70	indan g	rerval tested, cu		38. GEO	GEOLOGIC MARKERS	•
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.		-	
Lower Morran	9836	12966	Sandstone	NAME	MEAS, DEPTH	TRUE VERT, DEPTH
Middle Morbow	1861	. T886	Sandstone	Yates	4241	
				Queen	11381	
				Grayburg	1484	
				San Andres	19761	
				Glorietta	34581	
			,	Tubb	4451	
-			·	Drinkard	5376"	
				Abo	5794"	
				Wolfcamp		:
				Cisco	19992	. ,.
, 4				Canyon	83681	
				Strawn	88441	, . <b>F</b>
				Morrow	94541	. <i></i> ,
				Morrow Clastids	97701	
				Barnett .	100161	
				,		
W. W. C. C. C. C. C. C. C. C. C. C. C. C. C.						
**************************************					•	
		•	•			

#### State of New Mexico Energy, Minerals and Natural Resources Department

P.O. Box 1980, Hobbs, NM 28240		~~~~~~					at Bot	tom of Page
DISTRICT II P.O. Drawer DD, Artesia, NM 88210			Box 2088		ON			
DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410	1	anta Fe, New M						
I.	REQUEST	OR ALLOWA ANSPORT O					,	
Operator MEWBOURNE OIL COM	,	····			Well	API No.		
Address OIL COM	PANY /				30	-015-2	6575	
P. O. Box 7698, T	yler, Texas	75711						
Reason(s) for Filing (Check proper box)			Oil	her (Please exp	lain)	·		
New Well		n Transporter of:						
Recompletion		Dry Can L						
If change of operator give name and address of previous operator	Casinghead Gas	] Condensate [_]						
II. DESCRIPTION OF WELL	. AND LEASE	······································						<del></del>
Lesse Name	Well No.	Pool Name, Includ	ling Formation		Kind	of Lesso		case No.
CHALK BLUFF FEDER	AL 1	North Ill:	inois Car	np Morrov	7 (\$100)	Pederal og P		0557371
Unit Letter N	. 2250	Feet From The	West Lie	790	)F	eet From The	Sout	h Line
Section 1 Townsh	ip 18 South	Range 27	East ,N	мрм,	·	Eddy		County
III. DESIGNATION OF TRAP	VSPORTER OF O	IL AND NATU	RAL GAS					
Name of Authorized Transporter of Oil AMOCO Pipeline Inter- corporate Trucking Name of Authorized Transporter of Casin	G or Conse		Oil Ten	e address to whi iden: Dept	uch approved BOX 70	l copy of this , 2068 Thi	form is to be s	eni) 41.70–2068
Name of Authorized Transporter of Casin	ghead Gas	or Dry Gas 🔯	Address (Giv	e address to wi	ich approve	com of this	form in to be a	****/U-ZUGG
Transwestern Pipeline	Company		P.O.Box	: 1188, н	ouston,	Texas	77251-11	88
If well produces oil or liquids, give location of tanks.	Unit Sec.	18S   27E	is gas actually	y <del>connected?</del> 'es	When	?	n, 1991	
If this production is commingled with that IV. COMPLETION DATA			ling order numl	ber: N	0 '			
Designate Type of Completion	- (X) Oil Well	Gas Well	Now Well	Workover	Deepea	Plug Back	Same Res'v	Diff Res'v
Data Spuddod	Date Compl. Ready to		Total Depth			P.B.T.D.	l	_i
12/22/90	3/07/9			10,120'		1.0,1,0.	10,079	
Elevations (DF, RKB, RT, GR, etc.) KB 3625†, GR 3609† Perforations	Name of Producing Fo		Top Gil/Gas P	9936'		Tubing Dep		
9936-46', 9964-67', 1	13',2 SPF,Tota	al 28				Depth Casin		
the many	TUBING,	CASING AND	CEMENTIN	IG RECORI	)	<u> </u>	w	····
HOLE SIZE 17-1/2"	CASING & TU			DEPTH SET		5	ACKS CEME	NT .
12-1/4"	1.3 <b>-</b> 3,		***************************************	400'			425 /	set ID-2
8-3/3"	7"	· O		2604 <b>9</b> 450 <b>1</b>				-12-91
7"	41/	2" Liner	<del></del>	10119'			1350 Z	MATCH
/. TEST DATA AND REQUES OIL WELL (Test must be after to	T FOR ALLOWA	BLE				·		
Onte First New Oil Run To Tank	covery of total volume of	load oil and must	be equal to or e Producing Met	xceed top allow	able for this	depth or be for	or full 24 hour.	e.)
			T TOOLGOOD SALES	sou (riow, pue		c.)		1
ength of Test	Tubing Pressure		Casing Pressure	8		Choke Size		
Actual Prod. During Test	Oil - Bbls.		Water - Bbis.			Gas- MCF	·-·	
GAS WELL			······································	····	l			
actual Prod. Test - MCF/D	Length of Test		6C					
886	. 24 hou		Bbls, Condense	ummer 1		Gravity of Co	ndensale B	
Back Pressure	Tubing Pressure (Shut-in		Casing Pressure			Choke Size		
	1600#			·		8,	/64"	
I. OPERATOR CERTIFICA  I hereby certify that the rules and regulati Division have been complied with and the is true and complete to the best of mys. [as.]	one of the Oil Conservat	II	OI	IL CONS	SERVA	TION D	IVISIO	4
De Mont	www.ge and belief.	/	Date A	\pproved		MAY 1	1991	
Signature	where		Po-	Obicii	NAL SIGI	IED BY		
Gaylon Thompson, Engine	ering Operati	ons	Ву		WILLIAM		<del></del>	
Printed Name	T	ile	Title			DISTRICT	If .	
March 11, 1991 (90	3) 561-2900 Telepho		11110			····		

- 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 tabula Request for anowable for newly drilled on deepened wen must be accompanied by with Rule 111.
   All sections of this form must be filled out for allowable on new and recompleted.
   Fill out only Sections I, II, III, and VI for changes of operator, well name or analy.
   Separate Form C-104 must be filed for each pool in multiply completed wells.



Form 3160-5 (June 1990)

12.

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTI

	CONS COUNTS C/S	ř
OI	DD LORN TAKONED	
25840	Andgelikirini No. 1004-0135	
Arte	5. Lease Designation and Serial No.	
	NM-0557371	
	6. If Indian, Allome or Tribe Name	
reservoir.		
	7. If Unit or CA, Agreement Designation	
	S. 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	
	5.4 6 N. W	
	Eddy Co., N.M.	
CE, REPOR	T, OR OTHER DATA	
OF ACTION		
	Change of Plans	
	New Construction	
	Non-Routine Fracturing	
	Water Saut-Off	
	Conversion to Injection	
·····	Dispose Water (Nose: Report results of multiple completion on Well	
	Completion or Recompletion Report and Log form.)	
nd date of starting	any proposed work. If well is directionally drilled,	
ימומי. כו	rculate hole	
010 . 0	1,001000 11010	
nn # == -		٠
eive		
_ ·		
	<b>√</b>	

Do not use this form for proposals to drill or to deepen or reentry to a different Use "APPLICATION FOR PERMIT-" for such proposals SUBMIT IN TRIPLICATE 1. Type of Well Oil Gas Well Well 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) 2250' FWL & 790' FSL Sec. 1-T18S-R27E

TYPE TYPE OF SUBMISSION Abandonment Notice of Intent Recompletion Plugging Back Subsequent Report Casing Repair Altering Casing Final Abandonment Notice

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estima 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 @ 7 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.

REC

AUG 1 8 1995

OIL CON. DIV. DIST. 2

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<b>~</b> :	77.
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5	

14. I hereby cently that the sorteon is true and correct	Tide Engineer	Date 5/25/95
(This prove for Federal or State office use)	PETROLEUM ENGINEER	Date 8/14/95
Approved by Origin Signed by Shannon J. Shaw Conditions of approval, if any		

Fig. 14 U.S.C. Section 1915, mixed it a trime on try person knowledge and willfully in make its any impartment on against of the United States any indice, facilities on fraudulent statements in section to section in the control of the United States and indices on fraudulent statements.

CCB - Artesin

Form 3160-5 (June 1990)

(This space for Federal or State office use)

Approved by (OPHG SAZO) MIS G. LAMA Conditions of approval, if any:

L . FED STATES **DEPARTMENT OF THE INTERIOR**  FORM APPROVED
Budget Bureau No. 1084-0135
Expires: March 31, 1993

	BUREAU OF	LAND MANAGEMENT	Expires, indicit 51, 1895	
		S AND REPORTS ON WELLS	5. Lease Designation and Serial No. NM-0557371	
Do no	t use this form for proposals to di	rill or to deepen or reentry to a different reservoir.  OR PERMIT-" for such proposals	6. If Indian, Allottee or Tribe Name	
	SUBMIT	IN TRIPLICATE	7. If Unit or CA, Agreement Designation	
1. Type				
	Oil Gas Well Well X Other		8. Well Name and No.	
2. Name	of Operator		Chalk Bluff Federal Comm #1	
	bourne Oil Com[any		9. API Well No.	
	ss and Telephone No.		30-015-26575	
	Sox 5270, Hobbs, NM 505-393-5905 on of Well (Footage, Sec., T., R., M., or Survey De	acciplica)	10. Field and Pool, or Exploratory Area	
		scription)	N. Illinois Camp Morrow	
790'	FSL & 2250' FWL, Sec.1 T-18S R-27E		11. County or Parish, State	
40			Eddy, NM	
12.		) TO INDICATE NATURE OF NOTICE, REPORT, C	R 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	
	Trestation and a	Casing Repair	☐ Water Shut-Off	
	Final Abandonment Notice	Altering Casing	Conversion to Injection	
		Other Extend T/ A & CIT.	Dispose Water	
~~~~			(Note: Report results of multiple completion on Wei) Completion or Recompletion Report and Log form.)	
The a a 7" (a CIT	above caption well is currently under T/A CIBP above all perfs @ 7010'. We are co (500 psi) & after passing, extend T/A s question, please call.	sate all pertinet details, and give pertinent dates, including estimated date of ured and true vertical depths for all markders and zones pertinent to this vertical depths for all markders and zones pertinent to this vertical depths. Mewbourne Oil Company would like to extend this possible ring converting this well into a SWD. At this time, Metatus for an additional time.	vork.)"	
4. I hereb	by ceptifythat the foregoing is true and correct	тие N.M. Young District Manager		
		THE TANK TOUNG LIBERTOR WIGHTING	Date 10/06/00	

Title

Principles of Principality

Date 10/06/00

<sup>&#</sup>x27;s 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 aments or representations as to any matter within its jurisdiction.

Form 3160-5 (June 1990)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

N.M. C., Cons. Division

811 S. 1st Street

Budget Bureau No. 1004-0135

Expires: March 31, 1993

Artesia, NM 88210-2834tion and Serial No.

Da ==	CUMODY NOTICES	NAME OF THE PERSON OF THE PERS	NM-0557371
DO BO	t use this form for proposals to drill	or to deepen or reentry to a different reservoir.	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  F NOTICE, REPORT, OR OTHER DATA  TYPE OF ACTION  Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Hole Report results of multiple completion on Well Completion or Well Completion or Proposed work. If well is ders and zones pertinent to this work.)*  CON RECORD  ARTESIA
	of Well	N TRIPLICATE	l and the state of
	Oil Gas Well Well X Other		8. Well Name and No.
2. Name			Chalk Bluff Federal Comm #1
	Use "APPLICATION FOR PERMIT-" for such proposals    SUBMIT IN TRIPLICATE		
Do not use this form for proposals to drill or to deepen or reentry to a different of Use "APPLICATION FOR PERMIT-" for such proposals    SUBMIT IN TRIPLICATE			
	Do not use this form for proposals to drill or to deepen or reentry to a different re Use "APPLICATION FOR PERMIT-" for such proposals    SUBMIT IN TRIPLICATE	rigion	
	one of the first o	npuory	
790' (	FSL & 2250' FWL, Sec.1 T-18S R-27E		
12.	CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF NOTICE, REPORT, O	
	Notice of Intent		Change of Plans
	;	Recompletion	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  OR OTHER DATA  Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recomplation Report and Log form.)  the of starting any proposed work. If well is swork.)*
	Subsequent Report	Plugging Back	Printers,
	(T)		, many
	Final Abandonment Notice		Conversion to Injection
		X Other MIT	
		The second section of the second section of the section of the second section of the se	,,,,,,,
The a	pressure chart is enclosed.	ACCEPTED FOR RECORD  NOV 1 5 2000	OCD - ARTESIA

"itle 18 U.S.C. Section 1001, makes it a crime for any person knowingly and wilifully 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.

2250 FWL ENDYLANIM 11M 0557371 Many room Chalk Bluff Fed #1

Form 3160-5 (June 1990)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

A	rtesia, NM 88210 FORM APPROVED	(
- 1	Budget Bureau No. 1004-0135	
-	Expires: March 31, 1993	
•		_

NM OIL CONS COMMISSION

Drawer DD

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  Oil  Well  Well  Other	FER 2 1 1994	8. Well Name and No.
2. Name of Operator  Mewbourne Oil Company		Chalk Bluff Fed. Com. #1
110. 00% 00%	393-5905	30-015-26575  10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)		N. Illinois Camp 11. County or Parish, State

2 S	250' FWL & 790' FSL ec. 1-T18S-R27E		Eddy Co., N.M.
12.	CHECK APPROPRIATE BOX(s	TO INDICATE NATURE OF NOTICE, RE	PORT, OR OTHER DATA
	TYPE OF SUBMISSION	TYPE OF ACTI	ON
	Notice of Intent	Abandonment	Change of Plans
	Subsequent Report	Recompletion Plugging Back	New Construction Non-Routine Fracturing Water Shut-Off
	Final Abandonment Notice	Casing Repair Altering Casing Other Shut-In-Status	Conversion to Injection  Dispose Water (Note: Report results of multiple completion on Well

give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

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,

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

I hereby certify that it foregoing is true and correct of Signed	Title .	Petroleum Engineer	Date 01/25/94	
(This space for Federal or State office use) Approved b(ORIG_SGD.) JOE G. 1.484	Title .	PETROLEUM ENGINEER	Desc 2/16/94	

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.

	_	DW OLL CLAS. COMMISSION ASK
Formals03EVED UNIT (June 1990) DEPARTMEN BUREAU OF I	TED STATES T OF THE INTERIOR	Artosia. Net ESTPAM APPROVED Budgel Bureau No. 1004-0135 Expires: March 31, 1993  5. Lease Designation and Serial No.
DO HOL GOD this form for brobookis to an	Il or to deepen or reentry to a different i	6. If Indian, Allottee or Tribe Name
SUBMIT	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
I. Type of Well    Oil   Gas   Other	NOV 1 7 i	8. Well Name and No.
Form 31003   Notice of Intern  UNITED STATES  (June 1996)   DEPARTMENT OF THE INTERIOR  DEPARTMENT OF THE INTERIOR  SUNDAY NOTICES AND REPORTS ON WELLS  DO not use this form for proposals to drill or to deepen or reentry to a different reservoir.  SUNDAY NOTICES AND REPORTS ON WELLS  BY "APPLICATION FOR PERMIT—" for such proposals  SUBMIT IN TRIPLICATE  1. Type of well  SUBMIT IN TRIPLICATE  1. Type of well  White Company  Mewbourne Oil Company  Mewbourne Oil Company  Address of relations  NOV 1 7 1953  1. Well Years, See, T. R. M. or Survey Description)  2250' FML & 790' FSL of 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 Intern  Monitories of Intern  Adaptoment  Submit Submi		
P.O. Box 5270 Hobbs, New Mex	UNITED STATES  DEPARTMENT OF THE INTERIOR  DEPARTMENT OF THE INTERIOR  SUNDRY NOTICES AND REPORTS ON WELLS  ON USE 'APPLICATION FOR PERMIT—' for such proposals  SUBMIT IN TRIPLICATE  SUBMIT IN TRIPLICATE  SUBMIT IN TRIPLICATE  ALSO SUBMI	
		11. County or Parish, State
12. CHECK APPROPRIATE BOX(s	TO INDICATE NATURE OF NOTIC	
	Recompletion	New Construction
	Casing Repair Altering Casing	Conversion to Injection Dispose Water
* Verbal from Adam Salameh  9/10/93 Abandon Morrow formation 9/11/93 Perforate Cisco from 78: 9/12/93 Squeeze Cisco from 78: 9/15/93 Drill out squeeze perfs 9/16/93 Perforate Cisco from 76: 9/17/93 Abandon Cisco formation 9/18/93 Perforate Wolfcamp 7304 9/19/93 Acidize Wolfcamp w/1500 9/21/93 Set CIBP @ 7294' & perforate Wolfcamp w/2000 9/23/93 Set CIBP @ 7208' & perforate Wolfcamp w/2000 9/23/93 Acidize Wolfcamp w/2000	n. Set CIBP @ 9800' & cover w 26'-7830'. Test & evaluate. '-7830' w/600 sx. Class "C". to 7792'. Squeeze held 2,0076'-7678'. Test and evaluate. set CIBP @ 7600' & cover w/3'-7314'. Test & evaluate. gal. 15% NE-FE from 7304'-731 gal. 15% NE-FE from 7262'-7278 gal. 15% NE-FE from 7262'-7278	date of starting any proposed work. If well is directionally drilled,  1/35' cement.  35' cement.  4'.  3'. Test & evaluate.  28'.  Test & evaluate.
Kolent ( 12)	Tide Petroleum Engineer	Date 10/05/93
Approved by	10V 15 100	

\*See InstructionAFIREMAISINEW MEXICO

Mew bourne Oil company Chulk Bluff Feeboral #1 2250 FULL 740' FSL Sec. 1-1186-R27E 7050 EXBPQ 7008' CIBPQ 7394' 2 730 Y CIBPR 7600 W/35 coment 7676 2 7648' 7 830' Squecze w/600 Sx. Test to 2000\* < CTBPQ 9800' W/35' Cement 9861' 4" @ 10119"

Collination of the

FORM APPROVED **UNITED STATES** 3160-5 Budget Bureau No. 1004-0135 1990) DEPARTMENT OF THE INTERIOR Expires: March 31, 1993 **BUREAU OF LAND MANAGEMENT** 5. Lease Designation and Serial No. NM-0557371 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name 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 X Gas 8. Well Name and No. 2. Name of Operator Chalk Bluff Fed. Com. #1 9. API Well No. Mewbourne Oil Company 3. Address and Telephone No. <u>30-015-26575</u> 10. Field and Pool, or Exploratory Area (505) 393-5905 P.O. Box 5270 Hobbs, New Mexico
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 88241 N. Illinois Camp
11. County or Parish, State 2250' FWL & 790' FSL of Sec. 1-T18S-R27E Eddy Co., N.M. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF ACTION TYPE OF SUBMISSION Notice of Intent Change of Plans Abandonment Recompletion New Construction Subsequent Report Plugging Back Non-Routine Fracturing Casing Repair Water Shut-Off Final Abandonment Notice Conversion to Injection Altering 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.)\* 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. 14. I hereby certify th Petroleum Engineer 09/07/93

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.

<u>PETROLEUM ENGINEER</u>

Title

(This space for Federal or Sta

onditions of approval, if any

\pproved by

(ORIG.

he office use)

SGD.) JOE G. LARA

30-015-96575 Oseid-14744 Paopealy-1876 Pool-18890

> 3-19-91 DUAL LAT. 2595-9412 9392-9412 DUAL SPACED NEUTRON LO F-9417 8500-19121

3-19-91

DUAL LAT.

2575- 9446

9350 5PACED

NEUTRON

LOF-9417

8500-13161

NC Tops	DEM	5/14/91
Queen		1140
Grayburg		1430
San Andres		1975
5 lorista		3546
Abo		>
wolfcamp		4860
Ponn		
Strown		
Atoka		9435
Morrow		9703

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# 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

Navajo Refining Co. P. O. Box 159 Artesia, New Mexico 88211 Eile Coby

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

 	·····		 
Va	ın Barto	m	
	eld Rep.	TT	

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

shirleyi@navalo-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.

Thereby fores

Shirley - Please note the attached document Signed by Darrell Moore.

District I

1625 N. French Dr., Hobbs, NM 88240

ict II

Jouth 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

Form C-104A August 11, 2000

Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505 Sub the impy of the final affected wells that he with 2 copies of this form per number of wells on that list to appropriate District Office

### **Change of Operator**

Previous Operator Information:	New Operator: Information:
OGRID: 14744  Name: Mewbourne Oil Company  Address: P. O. Box 7698  Address: City, State, Zip: Tyler, TX 75711	New Ogrid:  New Name:  Address:  Address:  Address:  City, State, Zip:  Memory State
I hereby certify that the rules of the Oil Conservation Division form and the attached list of wells is true and complete to the bound of New Operator  Signature:  Printed name:  Title:  Env. Mqr. for Water  Date: 12/5/00 Phone: Ses-748	and Waste
Previous operator complete below:	NMOCD Approval
Previous	Signature: Lim W. Seems
Operator: Mewbourne Oil Company Previous	Printed
OGRID: 14744	Name: 2:4:4
Signature: Morty Whethere Printed Name:	District: NOV Z 7 2000 Date:
27021- property code	- Lihalk Bluff Federal Com #1

27021- property code - What Oly flatal (00. 30-015-26575-API Humber 1-185-27€

			010	
Form 3160-5 (September 2001)	UNITED STATE DEPARTMENT OF THE I BUREAU OF LAND MANA	NTERIOR 1301	Oil Cons. .M. DIV-Dist. W. Grand Av	Expires: January 31, 2004
SEND	BUREAU OF LAND MANA RY NOTICES AND REPO his form for proposals to	PTS ON WEINE	esia, NM 882	150 Lease Serial No.
Do not use the abandoned w	his form for proposals to vell. Use Form 3160-3 (APD	drill or to re-enter ) for such propose	r an ils.	6. If Indian, Allottee or Tribe Name
				7. If Unit or CA/Agreement, Name and/or No.
1. Type of Well			34587	
	Other TEMPORARILY AE	ANDONED	153400139	8. Well Name and No.
2. Name of Operator NAVAJO REFINING COMPA	NY 15694	/ <sub>2</sub> 5	<b>k</b> '92'	WDW-3 #3 23592 9. API Well No.
3a. Address	13077	3b. Phone Non (includ	(e ared Wile)	30-015-26575
PO BOX 159, ARTESIA, NM	89211	505-748-3319	WIN CHED CIA	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec.	<del></del>		KECK HIED	NAVAJO INJECTION; PERMO-PENN
		/3	oco. K	/ 11. County or Parish, State
790 FSL, 2250 FWL, 1-18S-2	7E	L'all A		
in average in			Sec. 7.00	EDDY
	PROPRIATE BOX(ES) TO			PORT, OR OTHER DATA
TYPE OF SUBMISSION		TY	PE OF ACTION	100
	Acidize	<b>П</b> Осерев	Production (Start	Resume) Water Shut-Off
Notice of latent	Alter Casing	Fracture Treat	Reclamation	Well Integrity
Subsequent Report	Casing Repair	New Construction	Recomplete	Other RECOMPLETE AS
Final Abandonment Notice	Change Plans	Plug and Abandon	Temporarily Aba	ndon CLASS I INJECTION
Figure Aparduominent Monice	Convert to Injection	Plug Back	Water Disposal	WELL
If the proposal is to deepen dire Attach the Bond under which the	ctionally or recomplete horizontally he work will be performed or prov rolved operations. If the operation r tal Abandonment Notices shall be	<ul> <li>give subsurface location</li> <li>ide the Bond No. on file</li> <li>esuits in a multiple comp</li> <li>filed only after all require</li> </ul>	ns and measured and true with BLM/BIA. Require pletion or recompletion in rements, including reclan	y proposed work and approximate duration thereovertical depths of all pertinent markers and zones. It is subsequent reports shall be filed within 30 days a new interval, a Form 3160-4 shall be filed once ation, have been completed, and the operator has have been completed.
Original well name was CHALK	••			SUBJECT TO LIKE APPROVAL
DRILL OUT BRIDGE PLUG AT INJECTION-TEST PERFORATI	IONS AT 7050' - 7102', 7262' -	7278' TO PLAN SQU	EEZE-CEMENT JOB.	BY NMOCD
DRILL OUT BRIDGE PLUGS A SQUEEZE-CEMENT PERFORA	XT 7208' AND 7294', CLEAN ( ATTONS AT 7050', 7102', 7262	OUT HOLE THROUGH	3H PERFS AT 7304'-7:	314'.
DRILL OUT BRIDGE PLUG AT				APPROVED
RUN CBL/VDL AND CALIPER				AFFROVED
PERFORATE 8540' ~ 8620' AND RUN INJECTIVITY TEST, AND			•	
RUN INJECTION/FALLOFF TE		· .	:	SEP 2 9 2003
RUN DIFFERENTIAL TEMPER				
RUN RADIOACTIVE TRACER INSTALL INJECTION TUBING		76001		LES BABYAK
INSTALL WELL ANNULUS M	ONITORING EQUIPMENT, A	ND PREPARE WELL	FOR INJECTION.	PETROLEUM ENGINEER
14. 1 hereby certify that the foregoing				
Name (PrintedlTyped)	•	1.		<b>.</b>
Dairell N	3	Title	: 1AL .{	111 M
	loore	L	AV. MAC. T	AN NAWISLY NOWTHS
Signature Paul	More		7/17/03	or Waters White
Signature Paul	More			or waters water

ons of approval, if any, are attached. Approval of this notice does not warrant or 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 sames any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Averaged for record NMOCD

(Printed/Typed)

Office

Title

Date

Approved by (Signature)

District I

1625 N. French Dr., Hobbs, NM 88240 District II

301 W. Grand Avenus, Artesia, NM 88210 rict III

....00 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

'API Number		<sup>2</sup> Pool Code Pool Name	
30 - 015 -265	75	Navajo Injection; Permo-Penn	
Property Code		<sup>5</sup> Property Name	
23592	·	WDW	
OGRID No.		* Operator Name	'Elevation
15694	Navajo	Refining Company	3609' GL;
15674			3625' KB

Surface Location

UL or lot no. N	Section 1	Township 18S	Range 27E	Lot Idn	Feet from the 790	North/South line South	Feet from the 2250	East/West Hine West	Count <b>Eddy</b>
			11 Bott	om Hole	Location If	Different From	Surface	<del></del>	
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	Count
12 Dedicated Acres				ode 13 Orde		110700700Etti dige	reet Hom the	ENER IT CAL TITLE	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A
NON-STANDARD LINIT HAS BEEN APPROVED BY THE DIVISION

	NUN-SIA	NDARD UNIT HAS BE	EN APPROVED BY T	HE DIVISION
16				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
			3456789707	Signapur Danul Moore Prissed Name Darrell Moore
			RECEIVED A 33 OCO ARTESIA 35	Primed Name Darrell Moure  Title and E-mail Address Env. Mar. For Watera Unaste  Date Jarrell@navajo-refining.co  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.
2250	790			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:

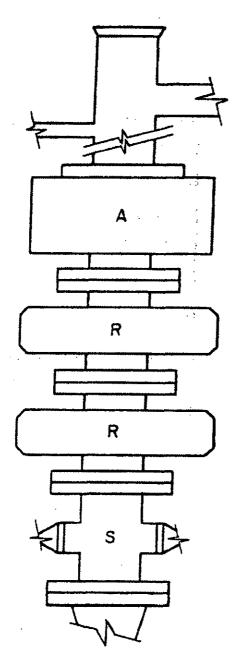
BHP (9000 feet) = 
$$2813 \text{ psia} + (9000 \text{ feet} - 7570 \text{ feet}) \times 0.433 \text{ psi/ft} \times 1.025$$
  
=  $3448 \text{ psia}$ 

#### 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.



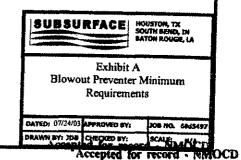
A = ANNULAR BLOWOUT PREVENTER 7-1/16", 3000 psi working pressure

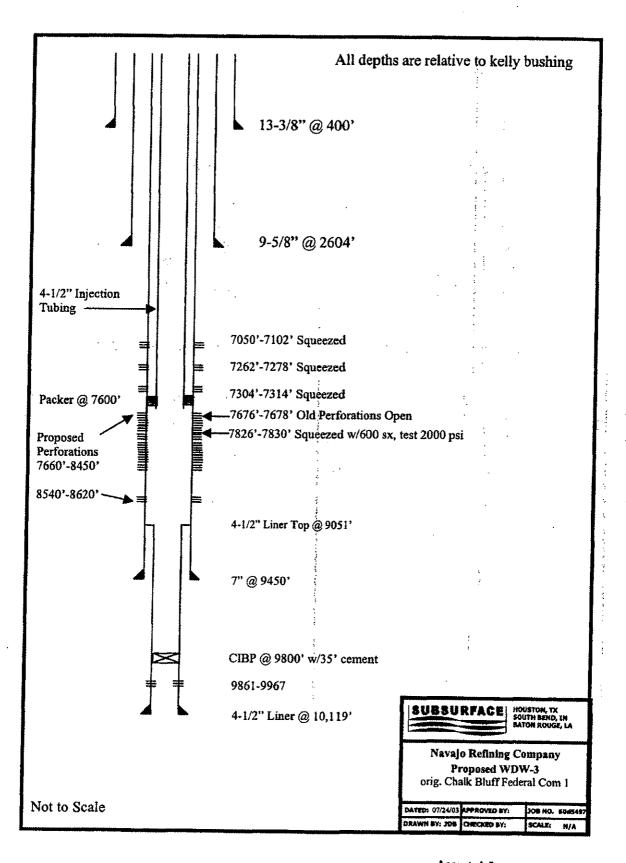
R = RAM TYPE BLOWOUT PREVENTER 7-1/16", 3000 psi working pressure

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





#### 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. <u>Location of Existing Wells</u>: Existing wells within one mile of proposed WDW-3 are shown on Exhibit B.
- 4. <u>Location of Proposed Facilities If Well Is Completed</u>: The well will be shut in after completion and testing.
- 5. <u>Location and Type of Water Supply</u>: 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. <u>Archaeological Survey</u>: 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.

Date

Date

Signature

Darrell Moore

Name

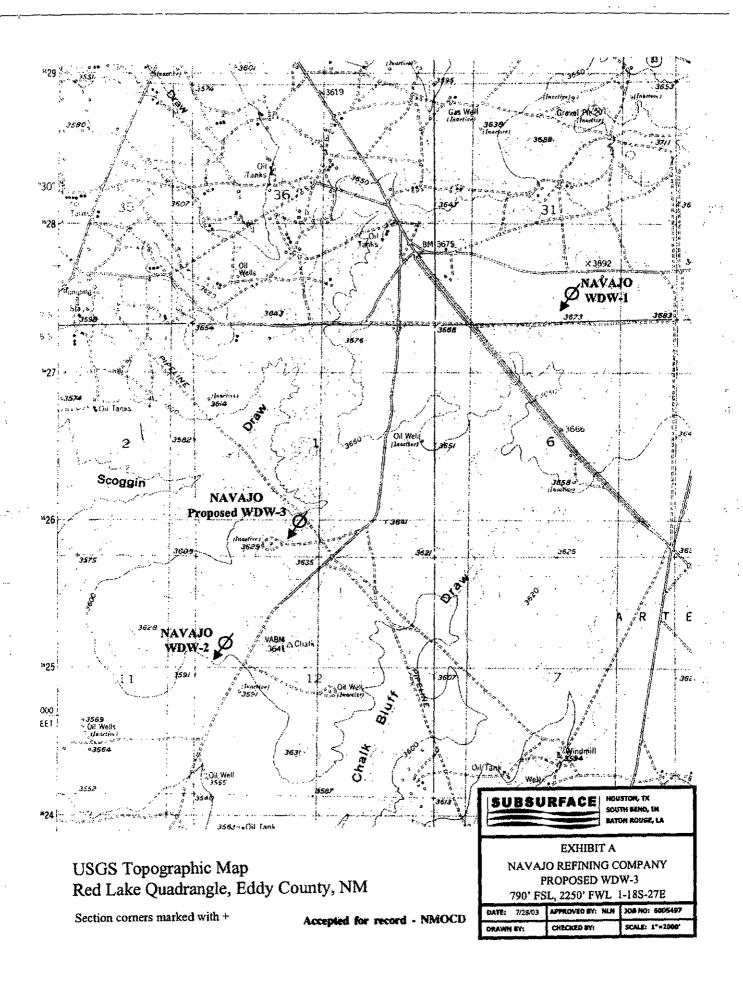
Eau. Mgr. for Water- Waste

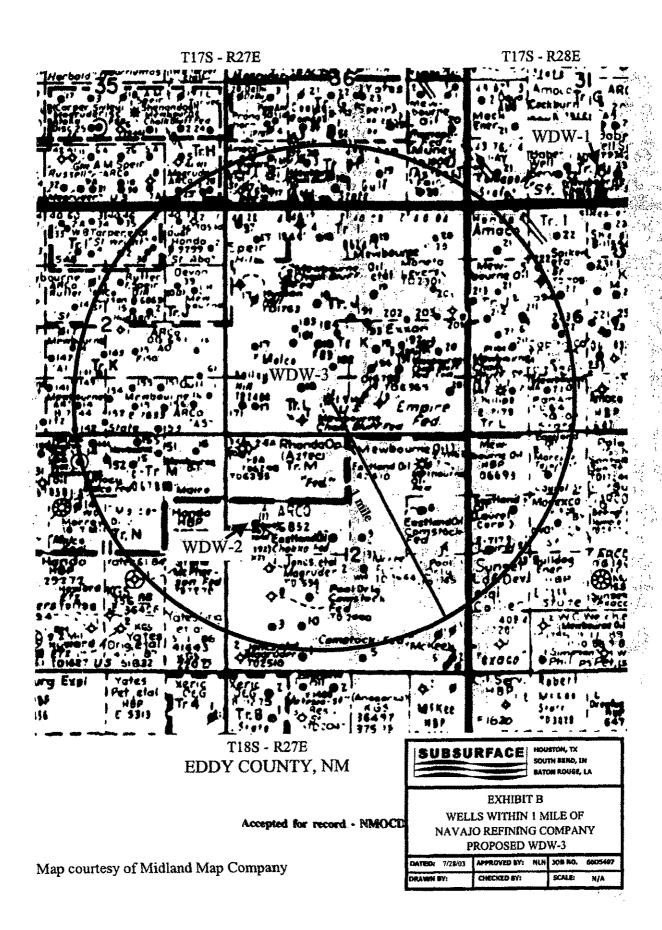
Title

Navajo Refining Company

Company

Accepted for record - NMOCD





Form 3160-5 (February 2005) OCD-ARTESIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: March 31, 2007

#### 5. Lease Serial No.

SUNDRY	SUNDRY NOTICES AND REPORTS ON WELLS								NM-0557371					
Do not use ti abandoned w	his form for proposals to rell. Use Form 3160 - 3 (A	,	6. If Indian, Allouce or Tribe Name											
	IPLICATE- Other instr	uctions o	n reve	rse side	•	7. If Unit o	CA/Agreer	nent, Name an	Vor No.					
1. Type of Well Oil Well	Gas Well		<del></del>			8. Well Na	ma nad No		······································					
2. Name of Operator NAVAJO R	CYCYNIBATO CODEWA NIV	<del></del>				WDW-								
3a Address	EFINING COMPANY	7h DhanaN	la (%). J			9. API Wa 30-015		•						
P.O. BOX 159, ARTESIA, NM	1 8821	3b. Phone N 505-746	RECE	LA Cardios				xploratory Are:	3					
4. Location of Well (Footage, Sec.,	T., R., M., or Survey Description)		JUL 1	7 2006		NAVA.	JO INJEC	TION; PERN	10-PEN					
790' FSL, 2250' FWL, 1-18S -	27 <b>E</b>	Q	OD-AFITMOIA				or Parish, S NM	late						
12. CHECK A	PPROPRIATE BOX(ES) TO	INDICATE	NATUR	E OF NO	OTICE, R	EPORT, OF	OTHER	DATA						
TYPE OF SUBMISSION				PE OF AC										
Notice of Intent Subsequent Report Final Abandonment Notice	Acidize Alter Casing Casing Repair Change Plans Convert to Injection	Deepen Fracture T New Cons Plug and A Plug Back	struction Abandon	Reco	uction (Sta amation amplete porarily Ab er Disposal	,	Well I	Shut-Off ntegrity RECOMPL CLASS 1 INJECTION						
WELL WILL BE PLUGG  DRILL OUT BRIDGE PL INJECTION-TEST PERF DRILL OUT BRIDGE PL	E WAS CHALK BLUFF FEDI GED BACK AND COMPLETE .UG AT 7010' AND CLEAN O FORATIONS AT 7050'-7102', 7 .UGS AT 7208' AND 7294'. CI	:D-AS A CLA UT TO 7208 7262'-7278' T LEAN OUT )	ass I inj '; 'o plan hole t	SQUEEZ HROUGH	E CEMEN PERFS A	IT JOB:								
DRILL OUT BRIDGE PL RUN CBL/VDL AND CAI PERFORATE 8540'-8620' RUN INJECTIVITY TES RUN INJECTION/FALL(	T, AND ACIDIZE IF NECESS OFF TEST; EMPERATURE SURVEY;	UT TO TOP FACE;	, AND 73 OF LIN	04'-7314'; ER AT 905	51';	AC	CEPTI	ED FOR						
INSTALL INJECTION TO INSTALL WELL ANNUL	UBING AND PACKER TO AI US MONITORING EQUIPM	PPROX. 7600 ENT, AND P	repar	E FOR WI	ELL INJE	CTION.		ES BARYA						
<ol> <li>14. I hereby certify that the foreprinted (Printed/Typed)</li> </ol>	going is true and correct							LEUM EN						
DARRELL MOO	DRE		Title E	NVIRONM	iental n	ANAGER I	FOR WAT	ER & WAST	E					
Signature David	ll Moore		Date	6/2	7/06									
	THIS SPACE FOR F	EDERAL	OR S	TATE O	FFICE	USE			·					
A repressed by							e 10001	d						
Approved by  Conditions of approval, if any, are a certify that the applicant holds legal which would entitle the applicant to	or equitable title to those rights in	oes not warran the subject lea	t or	tle Tice	ACC	pated to	SO/F							
Fitle 18 U.S.C. Section 1001 and Title		crime for any	nerson kn	wingly and	l willfully to	make to en	denortment	or or of t	ha United					

11tle 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.

# Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575] (Carl Chavez & Leonard Lowe- OCD) November 15, 2006

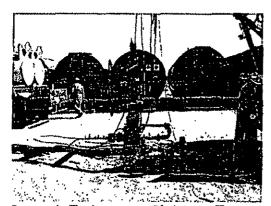
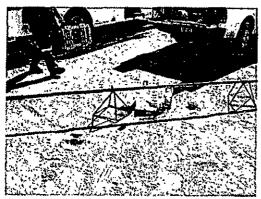


Image 1: Facing west. Christmas Tree with 500-barrel tanks in background. Far left tank was the only tank providing salt water. Truck on left is the pump truck pumping brine water only. Right truck is the rig truck (Wood Group Logging Service).



<u>Image 2</u>: Radioactive tool set up. Tracer, Iodine 131 (half-life ~ 8 days).



<u>Image 3</u>: Rig truck with view of data logger compartment (Wood Group Logging Services).



<u>Image 4</u>: Petroplex workers prepping wellhead for wire line tool entry.

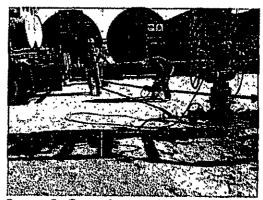


Image 5: Petroplex employees laying pipe from pump truck to well head.

## Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575] (Carl Chavez & Leonard Lowe- OCD)

November 15, 2006

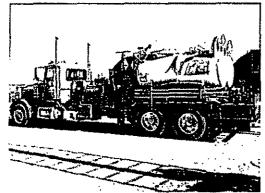


Image 6: Pump truck, Petroplex, for Brine water pumping only. No HCL used throughout process.



<u>Image 7</u>: Securing of the wire line to the wellhead.

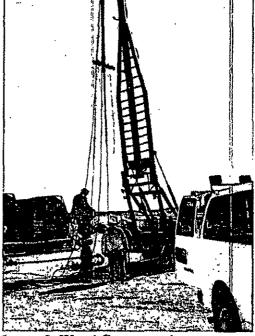


Image 8: Wood Group employee securing wellhead for tool entry.

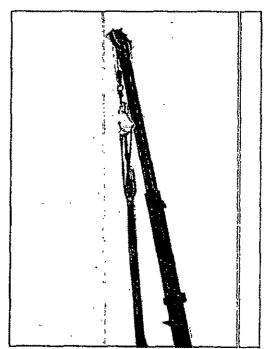


Image 9: Configuration at the top end of the boom.

## Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575] (Carl Chavez & Leonard Lowe- OCD)

November 15, 2006



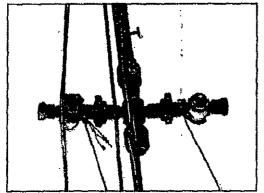
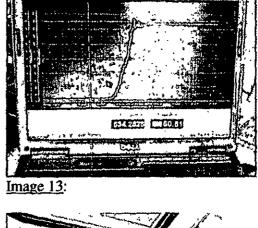


Image 10:



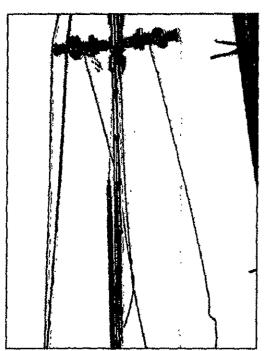
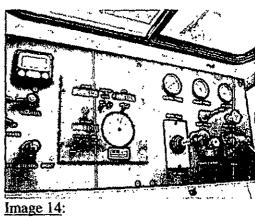


Image 11:



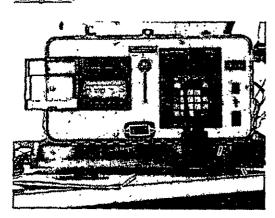
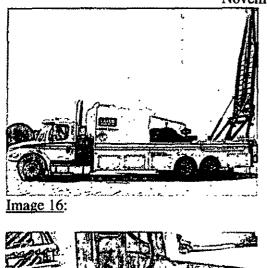
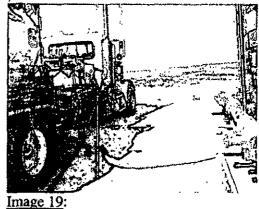


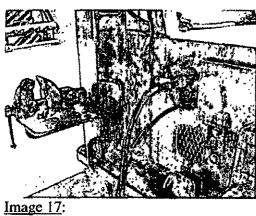
Image 15:

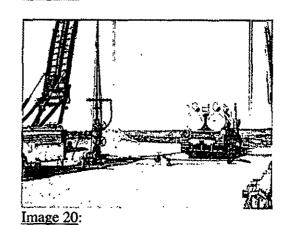
## Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575] (Carl Chavez & Leonard Lowe- OCD)

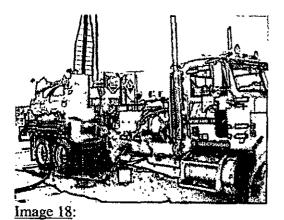
November 15, 2006

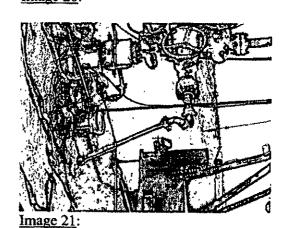




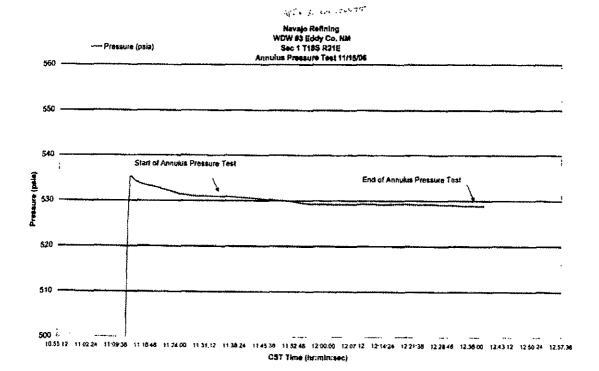


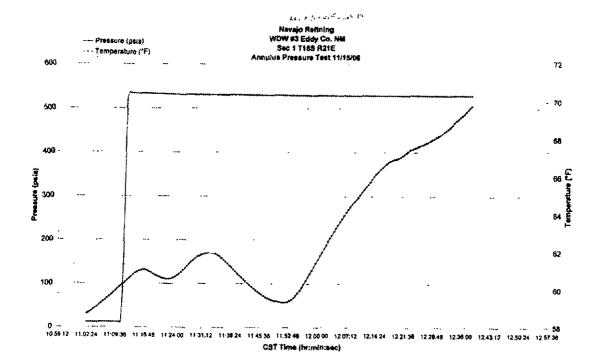






# Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575] (Carl Chavez & Leonard Lowe- OCD) November 15, 2006





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

### State of New Mexico Energy Minerals and Natural Resources

May 27, 2004
Submit to appropriate District Office

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

☐ AMENDED REPORT

Form C-101

1220 S. St. F						a Fe, N				,				
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	<b>,</b>	·	8 Prope	sed Botto	om Hole Loca	ation If I		***************************************	Surface					
UL or lot no.	Section	Township	Range	Lot I	do Feet f	rom the	North/S	iouth line	Feet from the	Enst/W	est line	County		
£		L	L	Ad	ditional W	ell Info	rmati	 on	· · · · · · · · · · · · · · · · · · ·	<u> </u>	J	···		
"Work Type Code "Well Type Code "Coble/Rotary "Lease Type Code "Ground Level Elevation												nd Level Elevation		
	E		<u>.</u>			X		· · · · · · · · · · · · · · · · · · ·	······		····	3609		
	ulipie 10		17 Proposed Dep 9051	uth		malios NYON			12 Contractor		2	Spud Date		
Depth to Grou		NKNOWN		Distance	from nearest fro			7 22/5	Distance from	n nearest s	urface w	nter 10 MO ES		
Pit: Liner: Syntheticmils thick ClayPit Volume;bbsDrilling Mcthod;											THE COLL ES			
Closed-Loop System C Fresh Water Drine X Diesel/Oil-based Gas/Air														
Proposed Casing and Cement Program														
Hole Si	ZC	Cas	ing Size	Casing	weight/foot	S	etting Do	pth	Sacks of Co	ment		Estimated TOC		
17-1/	2"	13	3/8"	54	50#		400		425 - C	RC				
12-1/	4"	9	5/8"		36#		2604	>	1025 - C					
8-3/4	>>		7"	26#	and 29#		9450	•	1350 - C	IRC	<u> </u>			
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 and proposed new productive zone and proposed new productive zone and proposed new productive zone and proposed new productive zone and proposed new productive zone zone in the blowout prevention program, if any. Use additional sheets if necessary.  Describe the blowout prevention program, if any. Use additional sheets if necessary.  DRIGHTON THEST PERFORATION SONE AND COMPLETED AS A CLASS I INJECTION WELL AS FOLLOWS:  DRILL OUT BRIDGE PLUG AT 7010' AND CLEAN OUT TO 7208;  INJECTION-THEST PERFORATIONS AT 7050'-7102', 7262'-7278' TO PLAN SQUEEZE CEMENT JOB;  DRILL OUT BRIDGE PLUG 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 CEL-VOL AND CALIPER FROM 9051' TO SURFACE;  PERFORATE 8540'-8620' AND 7660'-8450;  RUN INJECTION FALL OFF TEST;  RUN INJECTION FALL OFF TEST;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACER SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;  RUN RADIOACTIVE TEACH SURVEY;														
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			ater e W		<del>, , .</del>	Approva	l Date:	<u> </u>	06 Ex	piration D	ate: 6	111/07		
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	·		<u> </u>							J// (V)	<u>رزز - ا</u>	-4 /NU31		

APPROVE CASING PROGRAM.

District 1

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

rict III

District IV

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

1220 S. St. Fran	cis Dr., Saut	a Fc. NM 8750	5		, 1		ENDED REPORT		
		W	ELL LOC	CATION	AND ACR	EAGE DEDIC	ATION PLA	T	
	API Numb	er		<sup>2</sup> Pool Code			<sup>3</sup> Pool Neo	1¢	
30	- 015 -26	575				Nava	ijo Injection;	Permo-Penn	Ì
' Property	Code	,			* Property N	nino			Well Number
					WDW				3
OGRID	No.				Operator N	ame	,		Blayntion
	ļ			Na	vajo Refining	Company			3609' GL;
									3625' KB
			· · · · · · · · · · · · · · · · · · ·		10 Surface L	ocation	***************************************		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feel from the	East/West lin	e County
N	1	18S	27E		790	South	2250	West	Eddy
	<del></del>	<del></del>	11			~			

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.  Shamper Dattill Mobile  Printed Name Dattell Mobile	
	1			Tille size B. stall Address Env. Mags. For Water a Waste Date Classell@navayo-ratining.c	»щ
		,		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 bettef.	
•	2250 —	◆ ↑ 790		Date of Survey Signature and Scal of Professional Surveyor:	
ا ا		<b>+</b>		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:

BHP (9000 feet) = 
$$2813 \text{ psia} + (9000 \text{ feet} - 7570 \text{ feet}) \times 0.433 \text{ psi/ft} \times 1.025$$
  
=  $3448 \text{ psia}$ 

#### Reentry Procedure

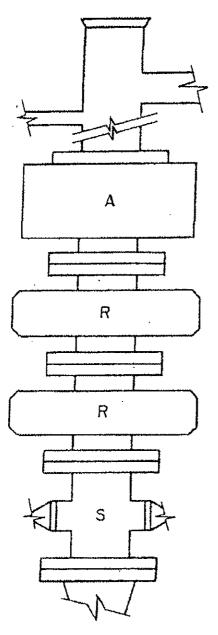
- 1. Level location to accommodate a workover rig, pump, tanks, and ancillary equipment. Build a small working pit approximately 30 feet square and 3 feet deep with a plastic lining. Move in the rig, tank, shale shaker, and work string.
- 2. Install a 7-1/16-inch, 3000-psi double hydraulic blowout preventer (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

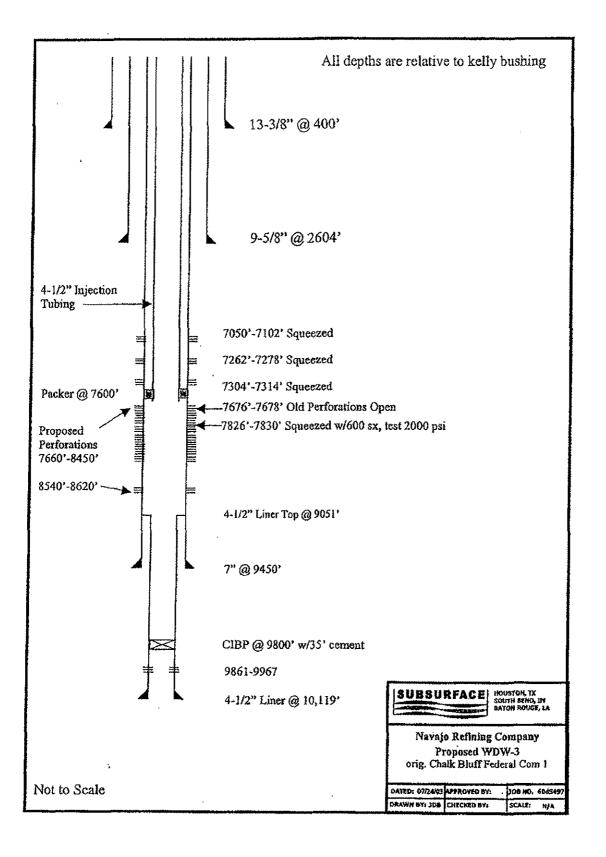
S = DRILLING SPOOL WITH SIDE OUTLETS 7-1/16", 3000 psi working pressure

Manual Choke Manifold 2", 3000 psi working pressure

Source: API RP 53, Recommended Practices for Blowout Prevention EquipmentSystems









#### 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.
- Location of Existing Wells: Existing wells within one mile of proposed WDW-3 are shown on Exhibit B.
- 4. <u>Location of Proposed Facilities If Well Is Completed</u>: The well will be shut in after completion and testing.
- 5. <u>Location and Type of Water Supply</u>: 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.
- 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. <u>Archaeological Survey</u>: 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

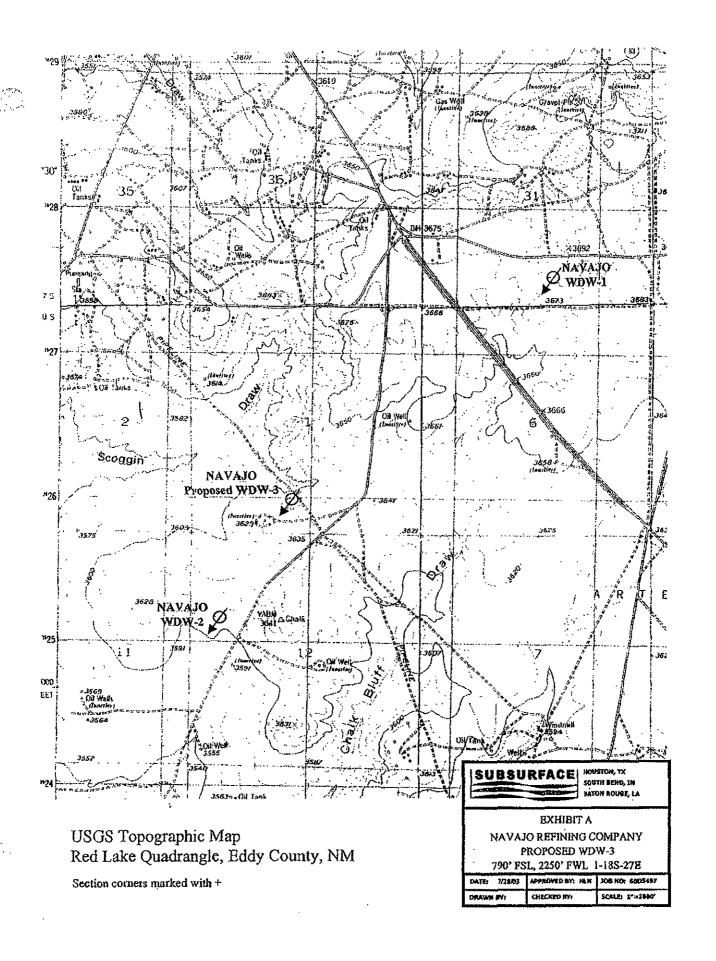
#### **Exhibits**

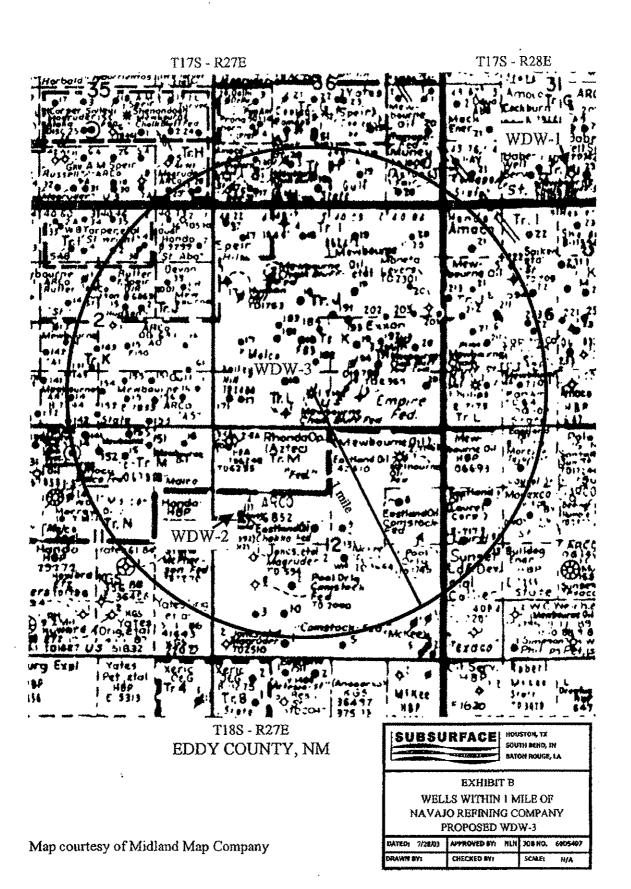
- A. Topographic Map
- B. Oil and Gas Map

#### 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.

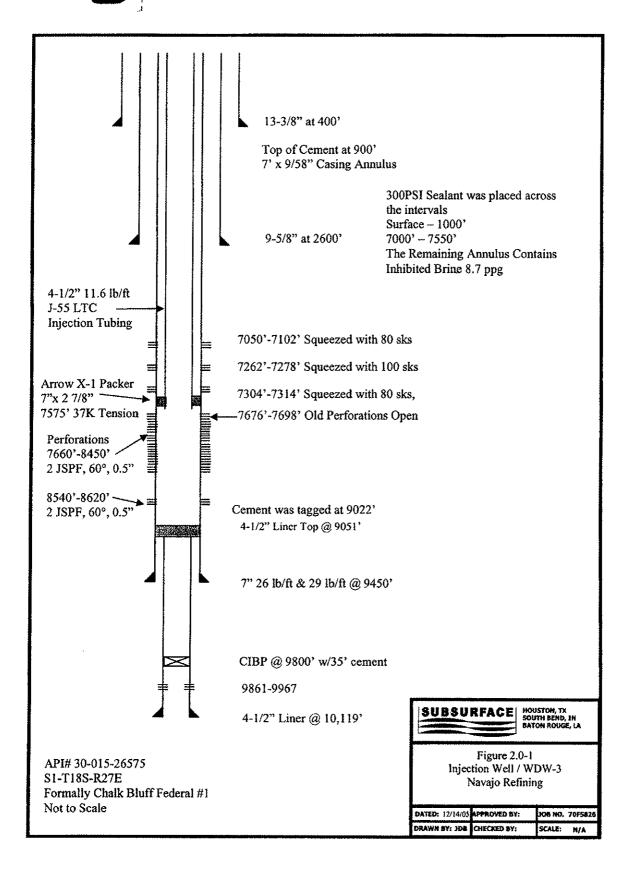
9/17/03	Danill More
Date	Darrell Moore
	EAU. Mgr. for Water Waite
	Navajo Refining Company Company





Submit 3 Copies To Appropriate District Office	State of Ne	w Mexico	Form C-103
District I	Energy, Minerals and	d Natural Resources	May 27, 2004
1625 N. French Dr., Hobbs, NM 88240			WELL API NO.
District II 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVA	TION DIVISION	30 - 015 - 26575
District III			5. Indicate Type of Lease
1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fa N	IN OTENS	STATE X FEE
District IV 1220 S. St. Francis Dr., Santa Fe, NM	Sama re, r	t. Francis Dr. VM 87505 345678970777	6. State Oil & Gas Lease No. NM-0557371
87505	NGES AND DEDODES ON	7 / Z	
(DO NOT USE THIS FORM FOR PROPE DIFFERENT RESERVOIR. USE "APPL PROPOSALS.)	CICES AND REPORTS ON A OSALS TO DRILL OR TO DESIGN ICATION FOR PERMIT" (FOR M.C.	OR PLUCERACK TO A	7. Lease Name or Unit Agreement Name WDW - 3
1. Type of Well: Oil Well	Gas Well X Other	OCD ARTEC S	8. Well Number 3
2. Name of Operator	12	5.174	9. OGRID Number
NAVAJO REFINING COMPAN	Y \rac{1}{6}	0/4	
3. Address of Operator P.O?BOX 159, ARTESIA, NM 8	8211	See prezertodo	10. Pool name or Wildcat
4. Well Location			
1	790 feet from the SOUTH	line and 2250 feet from t	he WEST line
	18 south Range 27 East		ty Eddy
Section 1 Township	11. Elevation (Show wheth		
	GR 3609', RKB 3625'	er DR, KKD, K1, GR, etc.)	
Pit or Below-grade Tank Application			
Pit type N/A Depth to Groundwa	ter 100 FT Distance from neares:	t fresh water well 1 MH.F. Di	istance from nearest surface water 6 MILES
	mil Below-Grade Tank: Volu		
12. Check	Appropriate Box to Indic	ate Nature of Notice, I	Report or Other Data
NOTICE OF IN	NTENTION TO:	90110	SEQUENT REPORT OF:
PERFORM REMEDIAL WORK	PLUG AND ABANDON	• 1	and the second s
TEMPORARILY ABANDON	CHANGE PLANS		
PULL OR ALTER CASING	MULTIPLE COMPL	•	
TOLE ON METER OF ONE	MOETH PE COME E	J CASING/CEIVIENT	30B 🖸
JTHER: To complete a Class 1 no	on-hazardous waste well 🥻	OTHER: Well com	pletion report to follow X
13. Describe proposed or comp	oleted operations. (Clearly sta	te all pertinent details, and	give pertinent dates, including estimated date ach wellbore diagram of proposed completion
or recompletion.	AK). SEE ROED 1103. FOR D	audipie Completions: Att	ach wellbore diagram of proposed completion
See attached well summary docume	nt and wall ashamatic		
See attached well summary docume.	nt and well schematic.		
MIT WHISSED DY C	Arl Chauez		
** ** ** C   b   ±	Fel		
No Chart Submi			
Mit Witnessed by C. No Chart Submit	/0·		
	<i>f</i>		
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-
Brane tank has been will be constructed or	I		r an (attached) alternative OCD-approved plan .
SIGNATURE	TAMO TITT	E Env. Mar for 1	Notor & Waste DATE 1/19/07
			THE PARTY OF THE P
Type or print name	pled for record E-m	ail address:	Telephone No.
r State Use Only	DIEG IN		<u>k</u>
	WHOCH O.		
APPROVED BY:	TITL	.E	DATE
Conditions of Approval (if any):			

Energy, Minerals and Natural Resources   Continue of the Con	Submit To Approp State Lease - 6 cop		rict Office			State of New 1	Mexico						Form C-105		
1627 N. French Dr. Jesses, Nob. 28740   122 O South St. Francis Dr.   122 O South St. Francis	Fee Lease - 5 copie			Er مر	ergy	, Minerals and N	atural Re	esources							
**Scripe 1 Township 18 South Rames 27 East NMFM    D. Does Spendided   11. Dute 17   Deep Rec 77   D.   Deep Rec 87   D.   Deep Rec 97   Deep	1625 N. French Dr	., Hobbs,	NM 88240												
1.20 Surface No. 1940   Sarfa E. No. 1940		emie, Art	esía, NM 88210		C	Dil Conservation	Divisio	on			~				
Santa Fe, NM 87505  Well COMPLETION OR RECOMPLETION DEPENDANCE  Waste Disposal Well  Pype of Completion: NEW   WORK X DEPPEN   PLUG   1968  NEW   WORK X DEPPEN   PLUG   1968  NAVAIO REFINING COMPANY  Address of Operator  NAVAIO REFINING COMPANY  Address of Operator  Section 1 Township 18 South Range 27 East NMPM  County Eddy, N		d Aston	NIM 97410		13	220 South St. F							. 🗖		
WELL COMPLETION OR RECOMPLETION ESPECTAND LOG   1a. Type of Well   GAS WELL   DRY   DYNAMING   DRY   DYNAMING   DRY   DYNAMING   DRY   DYNAMING   DRY   DRY   DYNAMING   DRY	≥ostrict IV					Santa Fe, NM	87505						<u>, Ll</u>		
The production   The				OD DEC	71 AD	LETION DEDO	DT AND	1100							
D. Type of Completion: NEW   Work X DEEPEN   PLUG   DEEP NEW   West   OVER   NEW   WORK X DEEPEN   PLUG   DEEP NEW   NEW   WORK X DEEPEN   PLUG   DEEP NEW   NEW			LETION	JR REU	JIVIP					7 Janes Name	T l /a . A .				
D. Type of Completion: NEW   Work X DEEPEN   PLUG   DEEP NEW   West   OVER   NEW   WORK X DEEPEN   PLUG   DEEP NEW   NEW   WORK X DEEPEN   PLUG   DEEP NEW   NEW			GAS WEL	. DR		OTHER Non-hazare	lous Waste	Disposal W	/ell	7. Lease Name	or Unit Ag	greement (	Name		
Net L OVER BACK STORE ST	b. Type of Com	nletion:				// .	1	6		Waste Disposal	Well / WE	OW - 3			
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N. Address of Operator				BAC	K	RESVRO TO COTH	Elly V	[ 5]		0 11/1/1/ 0					
9. Pool name or Wildest   9. Pool name or	2. Ivanie of Opera	itoi				Apr.	EO	65		8. Well No. 3					
1.   Nell Leastion			OMPANY		······································	/ 1	S/A	\Z/							
Well Lozation	3. Address of Ope	erator				13	.c)	87		9. Pool name or	Wildcat				
Unit Letter	P.O. BOX 159, ARTESIA, NM 88211														
10. Date Spudded   11. Date T.D. Reached   12. Date Compt. (Ready to Prod.)   13. Elevations (DF& RKE, RT, GR, etc.)   14. Elev. Casinghead   12. Date Compt. (Ready to Prod.)   13. Elevations (DF& RKE, RT, GR, etc.)   14. Elev. Casinghead   12. Date Compt. (Ready to Prod.)   15. Total Depth   16. Plug Back T.D.   17. if Multiple Compt. How Many   18. Intervals   16. Plug Back T.D.   17. if Multiple Compt. How Many   18. Intervals   16. Plug Back T.D.   17. if Multiple Compt. How Many   18. Intervals   16. Plug Back T.D.   17. if Multiple Compt. How Many   18. Intervals   16. Plug Back T.D.   17. if Multiple Compt. How Many   18. Intervals   16. Plug Back T.D.   17. if Multiple Compt. How Many   18. Intervals   17. Plug Back T.D.   17. if Multiple Compt. How Many   18. Intervals   17. Plug Back T.D.   17. if Multiple Compt. How Many   18. Intervals   17. Plug Back T.D.   17. if Multiple Compt. How Many   18. Intervals   17. Plug Back T.D.   17. if Multiple Compt. How Many   18. Intervals		-	- 700 E	at From The	COURT	U Line and 2250 Foot	Comme Office	Wilder 1:							
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1.2/22/90	Section 1	Townsh	ip 18 South R					C	ounty	Eddy, NM					
15. Total Depth   16. Phas Back T.D.   17. If Multiple Compl. How Many   2   18. Intervals   Clabel Tools   Cable Tools   Cable Tools   Clabel Tools   Cla	•	11.1		ied   12.			13.	Elevations DF	(DF& 3616	: RKB, RT, GR, -	etc.)	14. Elev			
10,119 ft 9020 ft Zones? Drilled By (Recentry Drill out CIBP) 9. Producing Interval(s), of this completion - Top, Bottom, Name Injection Interval 7660 ft to 8450 ft Cisco & 8540 ft to 8620 ft Canyon  CBL/VDL, Temperature, Caliper, Radioactive Tracer, Pressure  22. Was Well Cored No  CASING SIZE  WEIGHT LB.FT.  DEPTH SET  HOLE SIZE  CEMENTING RECORD  13 3/8"  54.50  400'  17 ½"  425-CIRC  NONE  9 55/8"  36  2604'  12 ¼"  1025-CIRC  NONE  7"  29 & 26  9450'  8 ¾"  1350-CIRC  NONE  4.  LINER RECORD  LINER RECORD  SACKS CEMENT SCREEN  LINER RECORD  SACKS CEMENT SCREEN  SIZE  DEPTH SET  HOUE SIZE  CEMENTING RECORD  NONE  4.  LINER RECORD  LINER RECORD  25.  TUBING RECORD  LINER RECORD  44 ½"  75567'  7575'  6. Perforation record (interval, size, and number)  6. Perforation record (interval, size, and number)  6. Perforation record (interval, size, and number)  6. Perforation record (interval, size, and number)  6. Perforation record (interval, size, and number)  700 'TO 8620' /0.5" /2 JSPF /60°  800' TO 8450' /0.5" /2 JSPF /60°  100 'SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF  7304' TO 7314'  80 SKS PREM 14.8 PPG CMT SQZ PERF				T.D.		<u>-</u>	Many					Cable			
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Injection Interval 7660 ft to 8450 ft Cisco & 8540 ft to 8620 ft Canyon	10 Producing Inte	mal(e)	of this complet	ion Ton Do	Han N										
CASING RECORD   CASING RECORD (Report all strings set in well)	Injection Interval 7660 ft to 8450 ft Cisco & 8540 ft to 8620 ft Canyon														
CASING RECORD (Report all strings set in well)  CASING SIZE WEIGHT LB /FT. DEPTH SET HOLE SIZE CEMENTING RECORD AMOUNT PULLED  13 3/8" \$4.50 400' 17 ½" 425-CIRC NONE  9 5/8" 36 2604' 12 ½" 1025-CIRC NONE  7" 29 & 26 9450' 8 ¾" 1350-CIRC NONE  4. LINER RECORD 25 TUBING RECORD  IZE TOP BOTTOM SACKS CEMENT SCREEN SIZE DEPTH SET PACKER SET  4 ½" 9051' 10,119' 175 NONE 4½" 7567' 7575'  6. Perforation record (interval, size, and number)  6. Perforation record (interval, size, and number)  6. Perforation record (interval, size, and number)  6. Perforation record (interval, size, and number)  70 50' TO 7102' 30 SKS PREM 14.8 PPG CMT SQZ PERF  8. PRODUCTION  8 at 6 First Production Method (Flowing, gast lift, pumping - Size and type pump)  NIECTION PULL)  10 Froduction Method (Flowing, gast lift, pumping - Size and type pump)  NIECTION PULL)  10 Froduction Method (Flowing, gast lift, pumping - Size and type pump)  NIECTION PULL)  10 Froduction Method (Flowing, gast lift, pumping - Size and type pump)  NIECTION PULL)  10 Froduction Method (Flowing, gast lift, pumping - Size and type pump)  NIECTION PULL)  10 Froduction Method (Flowing, gast lift, pumping - Size and type pump)  NIECTION PULL)  10 Froduction Method (Flowing, gast lift, pumping - Size and type pump)  NIECTION PULL)  10 Froduction Method (Flowing, gast lift, pumping - Size and type pump)  NIECTION PULL)  10 Froduction Method (Flowing, gast lift, pumping - Size and type pump)  NIECTION PULL)  10 Froduction Method (Flowing, gast lift, pumping - Size and type pump)  NIECTION PULL)  10 Froduction Method (Flowing, gast lift, pumping - Size and type pump)  NIECTION PULL)  10 Froduction Method (Flowing, gast lift, pumping - Size and type pump)  NIECTION PULL)  10 SKS PREM 14.8 PPG CMT SQZ PERF  7500 T 70102' 30 SKS PREM 14.8 PPG CMT SQZ PERF  7500 T 70102' 30 SKS PREM 14.8 PPG CMT SQZ PERF  7500 T 70102' 30 SKS PREM 14.8 PPG CMT SQZ PERF  7500 T 70102' 30 SKS PREM 14.8 PPG CMT SQZ PERF  7500 T 70102' 30 SKS PREM 14.8 PPG CMT SQZ PERF  7500 T 70102' 30 SKS PREM 14.8	21. Type Electric and Other Logs Run 22. Was Well Cored														
CASING SIZE															
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TOP   BOTTOM   SACKS CEMENT   SCREEN   SIZE   DEPTH SET   PACKER SET	24.				LIN	IER RECORD			25.	TU	BING RI	CORD			
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Total Production   Production Method (Flowing, gas lift, pumping - Size and type pump)   Well Status (Prod. or Shut-in)								****				*****			
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NJECTION WELL)  (INJECTION PUMP)  (INJECTION PUM	28			***************************************											
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Town Tubing Casing Pressure Calculated 24- Oil - Bbl. Gas - MCF Water - Bbl. Oil Gravity - API - (Corr.)  Fig. 1. AX INJECT 750 PSI 8 BPM N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	10/10/04	4	une.	NO CHOKE	O CHOKE Test Period N/A								ľ		
Hour Rate 8 BPM N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	<del>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>		**************************************		****	**************************************	Gee	MCE		lotor Dhi	1000		<u> </u>		
150 PSI 2. Disposition of Gas (Sold, used for fuel, vented, etc.) 3. List Attachments 2. ELL SUMMARY OF EVENTS, WELL WAS CONVERTED TO A CLASS I NON-HAZARDOUS WATER WASTE DISPOSAL WELL. A FULL REPORT WILL 3. 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  Printed Name Printed Title Env. Mer.  Date 1/8/27	Press.		j		four Rate						UilG	ravity - A	v1 - (Corr.)		
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#### 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.

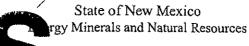
A 12 hr pump in and falloff test was performed down the 4 1/2-inch tubing. To maintain a surface injection pressure that was below the permitted pressure of 1550 psi the injection rate was lowered to 9 bpm at the end of the pump in procedure. The BHP gauge was placed at 8630 feet for 14 hrs to monitor 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
'trict IV
0 S. St. Francis Dr., Santa Fe, NM 87505



For drilling and production facilities, submit to appropriate NMOCD District Office.

For downstream facilities, submit to Senta Fe office

Form C-144 June 1, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

For drilling and pappropriate NMOO For downstream office

Pit or Below-Grade Tank Registration or Closure

	or below-grade tank Closure of a pit or below-g	
Operator: Reserve Comment Telepho	25/5-37/	
Address: SCIEGE MAN STREET AND	ne:(385)/79-33// e-mail address:	
Facility or well name: WOW #3 API#:	30-015-26575 U/L or Otr/Otr	Sec / T /8 PR 27 F
Facility or well name: WOW = 3 API#:  County: Eddy - Latitude	Longitude	NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal State Private Indian		
Pit	Below-grade tank	
Type: Drilling Production Disposal	Volume:bbl Type of fluid:	
Workover Emergency	Construction material:	
Lined I Unlined	Double-walled, with leak detection? Yes If n	not, explain why not.
Liner type: Synthetic P Thickness 22 mil Clay		
Pit Volumebbl		•
Depth to ground water (vertical distance from bottom of pit to seasonal	Less than 50 feet	(20 points)
high water elevation of ground water.)	50 feet or more, but less than 100 feet	(10 points)
	100 feet or more	( 0 points)
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water sources.)	No.	(Opoints)
,	Less than 200 feet	(20 points)
restance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points)
,ation canals, ditches, and perennial and ephemeral watercourses.)	(1000 feet or more)	( 0 points)
	Ranking Score (Total Points)	10
If this is a pit closure: (1) Attach a diagram of the facility showing the pit		
your are burying in place) onsite 🔲 offsite 💢 If offsite, name of facility_(		
remediation start date and end date. (4) Groundwater encountered: No 🎝 🕆	es If yes, show depth below ground surface	ft. and attach sample results.
(5) Attach soil sample results and a diagram of sample locations and excava-	······································	
WDW #3 RS DET NEW NEVICE OIL	DANY PLANS TO CLOSE I	Drilling Dit on the
WDW #3 Asper New MERICO OIL	CONSETUATION DIVICION T	WE SO IN the PA
AND BELOW Grade tank Guide In	IES, NAURIO PLANS TO TER	DOVE All fluids and
Drill cuttings, All cuttings will	be taken to a NM.O.C.	D. Approved site for
Disposal and Backfill with onsite	stockpiled soils. WE Will N	ofife O.C.D 48 hours
Prior to BegINING WORK.		
I hereby certify that the information above is true and complete to the best	of multipopulation and halfof V for the smaller than	
has been/will be constructed or closed according to NMOCD guideline	s X, a general permit L, or an (attached) altern	ative OCD-approved plan
		ļ
Date: 2/14/06	Signature Land	
Printed Name Title		
Your certification and NMOCD approval of this application/closure does notherwise endanger public health or the environment. Nor does it relieve the regulations.	of reneve the operator of manifely should the contents are operator of its responsibility for compliance with a	s of the pit or tank contaminate ground water or any other federal, state, or local laws and/or
Anoroval: Jens W. Beenge		-11-
ed Name/Title	Signature	Date: 2/12/67

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A W	Form 100	180 M	ର 🌣	BUR	PARTM EAU C	ITED STAT IENT OF TH OF LAND M	E INTI ANAGI	EMENT						OMBNO.	PPROVED 1004-0137 uch 31, 2007
` .	F.O.	S. WE	LL QOM	PLETIO	N OR	RECOMPLE	TION	REPOR	RT AND	LOG			5. Lease NM -	Serial No. 0557371	
n Nije	la 😘	of Well		eli 🔲 Ga	s Weli	Dry 0	ther		<del></del>		<del></del>	-	6. If Indi		or Tribe Name
103/	b. Pype	of Complet	rig.	New W	en 🔼	Work Over	Deeper	n Při	ng Back	Diff	Resvr, .		N/A 7 Unit o	r CA Agree	ement Name and No.
	2 Name	of Operate	05 25222	Other		NAMA	·········							-	
			1775 7 734	IO REFIN									WD	Name and W - 3	Well No.
	3. Addre	SS P.O. I	BOX 159, A	artesia,	NM 882	31		3a. Ph	one No. (i	nchide a	rea code)		). AFIW 30 - 0	(ell No. 2657 - 2657	/5
	4. Locat	ion of Well	(Report loc	ation clearl	y and in a	ccordance with	Federal :	requiremer	115)*		<del></del>	10	0. Field :	nd Pool, o	r Exploratory
	At su	rface 7	796' FRON	THE SO	U <b>TH L</b> II	NE AND 2250°	FROM	THE WE	ST LIN	E		<u> </u>			
	At top	prod. inte	rval reported	l below 76	56' AT '	THE SAME LA	DCATI	ON AS A	BOVE			1	I. Sec., I Survey	or Area	n Block and SI - TISS - R27E
						E SAME LOC						Tr.		y or Parisa	13. State NM
	14. Date S		I DOG BA	15. Date				16. Date C				ï	EDDY 7. Elever		RKB, RT, GL)*
	12/2:	2/1998		01/	29/19 <del>9</del> 1			J D d			to Prod.		3609'		
	ia. Total	•	(D 10,119		19.	Plug Back T.D.:				20. Dej	oth Bridge	e Plug Se	e MD TVI	, ,	CMTI 9051'-9022'
	21 Taran		VD 10,119		- Dun (8	ubmit copy of e	TVD 9	0022'		33 117-		7	No L		CMT 9051'-9022' mit analysis)
	•••			-	•	, RADIOACTI		ACED (%	1		s weil con DST ru				mit anatysis) mit report)
						set in well)	· · · · · · · · · · · · · · · · · · ·	ACER (2)	,	Dir	ectional S	urvey?	<b>V</b> N₀	Yes (	Submit copy)
	Hole Size	Ţ			p (MD)	Bottom (MD)		Cementer		Sks. &	Sium	y Vol.	Coment	Ton*	Amount Pulled
	17 1/2"	13 3/8		`	URF	406*	486°	epth	· · · · · · · · · · · · · · · · · · ·	Cement	(B	BL)	SURF	. тор	NONE
	12 1/4"	9 5/8"		<del></del>	)RF	2604"	2604		1025 H		+		SURF	***************************************	NONE
	8 3/4"	7 <sup>H</sup>	29 8	. 26 SI	JRF	9450'	9450	)*	1350 "	H"			9001		NONE
	6 1/4"	4 1/2"	'	90	51'	10,119'	10,1	19'	175 CI	ASS H			9851'-	<b>TOL</b>	NONE
	<del></del>	<del> </del>			······································	ļ	-				-			·	
	24 Tubing	g Record					<u> </u>		·			J		······································	
	Size		Set (MD)	Packer Dep	th (MD)	Size	Depth	Set (MD)	Packer D	epth (MI	))	Size	Depth	Set (MD)	Packer Depth (MD)
	4 1/2" 25. Produc	7567'	ale l	7567'		······································	34	Perforation	Dansed		.1				l
	23. 11000	Formation		T	ор [	Bottom		Perforated			Size	No. I	loles	I	Perf. Status
	A) CISC	00		765	<b>,</b>	8450	7660	' - 845 <b>0</b> '		0.	5"	1586		2 JSPF	
		YON		854	<b>)</b> '	8620'	8548	'- 8628'		Ð.	5 <sup>11</sup>	160		2 JSPF	/ 6 <b>0</b> °
	<u>C)</u> D)						+							<del></del>	
		Fracture, Tr	catment, Ce	ment Squeez	z, etc.		<u>.L</u>		······································	<b>-</b>	,	l			· · · · · · · · · · · · · · · · · · ·
•		epth Inter	vai		~~~~~				mount and						
	7050' - 7	· · · · · · · · · · · · · · · · · · ·	·· <del>-</del> ······			M 14.8 PPG N	<del></del>		~	<del> </del>					
	7262' - 7			<del></del>		em 14.8 PPG I M 14.8 PPG N									
										£		JUNIE			
	28. Produ				2			1		·		·			
	Produced	Test Date	Hours Tested	Production	Oil BBL	MCF B	ader BL	Oil Grav Corr. Al	गें 	Gas Gravit	У	roduction NON-MAI		LASS I WE	T.
	Choke Size	Tbg, Press, Flwg. SI		24 Hr. Rate	Oil BBL	Gas W MCF B	ater BL	Gas/Oil Ratio		Well St		WAITING	ON STAT	E APPROV	al to inject
	28a Produ					······································									
	Date Pirst Produced	Test Date		roduction	Oil BBL		der )L	Oil Grav Corr, AF	ity I	Gas Gravity	ŀ	roduction		Lass I wei	ı.
	Choke Size	Tog. Press. Flwg.		24 Hr. Rate	Oit BBL	Gas W. MCF BI	nter 31,	Gas/Oil Ratio		Well Sta	jan				<del>1</del>

\*(See instructions and spaces for additional data on page 2)

WAITING ON STATE APPROVAL TO INJECT

28h Prodi	oction - Inte	rval C	<del></del>	<del></del>				· · · · · · · · · · · · · · · · · · ·		
Date First	Test	Hours	Test	Oil BBL	Gas MCF	Water	Oil Gravity	Gas	Production Method	
Produced	Date	Tested	Production	BBL	MCF	BBL	Corr. APT	Gravity		
Choice.	Tbg. Press.	Csg. Press.	24 Hr.	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
Size	Flwg. SI	TIGS.	Rate	<i>D.D.</i> 2.	I IIICI	J				
28c. Prod	nction - Int	ervai D		<b></b>	1					
Date First	Test	Hours Tested	Test	Oil	Gas MCF	Water BBL	Oil Gravity	Gas	Production Method	<del></del>
Produced	Date	TOSTOT	Production	BBL	MCr	BBL	Corr. API	Gravity		
Choke	The Press.	Cag.	24 Hz.	Oil	Gas	Water	Gas/Oil	Well States	L.	
Size	Flwg. SI	Press.	Rate	BBL	MCF	BBL	Ratio			
29. Disp	osition of G	as (Sold, 1	used for fuel,	vented, etc	.)		<del></del> ,	.1		, , , , , , , , , , , , , , , , , , ,
N/A	(NON-H	AZARDO	US CLASS	I WELL	)					
30. Sum	mary of Por	ous Zones	(Include Ag	rifers):		····		31. Formati	on (Log) Markers	
tests,	v all import including o ecoveries.	lant zones lepth inter	of porosity a val tested, cu	und conten shion used,	ts thereof: ( time tool op	Cored interva en, flowing a	ls and all drill-stem and shut-in pressures			
		Тор	Bottom		Danne	ntions Conts	nte ato		Name	Тор
rom	aation	roh	DOME		Descri	ptions, Conte	IMS, CAC.		Name	Meas. Depth
										}
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		1								
			-							
			<u> </u>							1
										İ
										1
										}
32. Additi	ional remar	ks (include	plugging po	ocedure):		<del></del>	······································	<u> </u>		
		-		•						
REC EXIS SQU	OMPLET STING PL EEZED O	ed the UGS WE IFF WITI	well fo re drile i cemen	R INJEC .ED OUT F AT 7050	TING NON TO THE 1 I' TO 7102'	I-HAZARD OP OF TH ', 7262' TO	OUS WASTE WA E LINER PLUG A 7278', AND FROM	TER FROM LT 9022' AN 1 7344' TO 7	MPANY BY NAVAJO REFII I THEIR REFINERY IN AR D THE EXISTING PERFOR 314'. A 4 1/2" 11.6 #/FT TUB WAS WITNESSED BY OCI	TESIA, NM. THE ATTIONS WERE ING STRING
(SEE	ATTACI	IED WEI	LL SUMML	ARY FOR	MORE D	ETAILS)				
33. Indicat	te which itn	nes have be	en attached	by placing	a check in ti	e appropriat	e boxes:	······································		
☑ Ele	ctrical/Med	hanical Lo	gs (1 full set	req'd.)	☐ Ge	ologic Report	DST Report	Direction	al Survey	
☑ Sur	dry Notice	for pluggi	ng and cemen	t verificati	on 🔲 Con	e Analysis	Other:		·	
34. Thereb	y certify th	at the fore	coing and att	ched info	mation is co	mplete and co	wrect as determined fi	rom all availat	de records (see attached instruction	003)*
Name (	olease prin		Darre	11 /	Moor	<u>د</u>	Tide E	nu. M	gr for Water	~ Waste
Signati	ure <u> </u>	_J)a	ul	IN	the		Date	1/24/0	7	
Title 18U.	S.C Section	n 1001 and	Title 43 U.	S.C Section	or 1212, maj	ce it a crime	for any person knowi	ngly and willf	fully to make to any department (	or agency of the United

16.	ورورورورورورورورورورورورورورورورورورور	1037 V														
S. A. A.	Form (Agenda	180 %	23456		DEPAR BUREAU	UNITED STATEMENT OF TO	THE IN	GEMENT						OMBNO	LPPROVED 1004-0137 (arch 31, 2007	
	3. C.	& ME	LL GO	MPLE	TION O	R RECOMP	LETIO	N REPOI	RT AND	LOG			5. Lease NM	Serial No. - 0557371		
	ia.	of Well		Vell [	Gas Wel		Other		·····		<del></del>			m, Allotte	e or Tribe Name	
N. C. W.	b. Type	of Comple	itog.		cw Well	Work Over		pen [P	ng Back	☐ Diff.	Resvr,	•	N/A  7 Unit or CA Agreement Name and No.			
1,1	9LGL4	of Operat	Of MAN	Other	POTATIAL	COMPANY					<b>,</b>					
			11/61/					*******					WD	Name and W - 3	Well No.	
	3. Addr	ess P.O.	BOX 159,	ARTE	sia, nm	88211	-	3a. Ph	one No. (i	nchide ari	ea code)	)   '	9. AFIW 30-0	/ell No. 015 - 265	75	
	4. Loca	tion of Wel	l (Report l	ocation (	learly and	in accordance wi	th Federa	al requiremen	113)*	*************	~~~~~	I	0. Field :	and Pool, o	or Exploratory	
	At su	rface .	790' FRO	M THI	SOUTH	LINE AND 22	50' FRO	M THE WI	ST LIN	E		<u> </u>		F 73. 34		
	At to	p prod. inte	rval report	ed below	765 <b>8</b> ° A	T THE SAME	LOCAT	TION AS A	BOVE			1	Survey	i., K., M., ( y of <b>Á</b> rea	on Block and St - T18S - R27E	
						THE SAME L						1	2. Count	y or Parish	13. State NM	
	14. Date				Date T.D. I			16. Date C		······		ī			RKB, RT, GL)*	
		2/1990			01/29/19			□ D &		Ready			36091			
	is. Total	-	MD 10,11		1	19, Plug Back T.I			1	20. Dep	dh Bridg	e Plug Se	e MD TVI		CMT 9051'-9022'	
	TVD 10,119* TVD 9022*  21. Type Electric & Other Mechanical Logs Run (Submit copy of each) 22. Was well co											- <u></u>			CMT 9951'-9822'	
	CBL/VDL, MULI-ARM CALIPER, TEMP, RADIOACTIVE TRACER (2006)  Was DST												No L		bmit analysis) bmit report)	
							TIVE	RACER (2)	rvo):	Dire	ctional :	Survey?	<b>₹</b> №	Yes (	Submit copy)	
						igs set in well)	Stag	e Cementer	No of	Sks. &	Share	ry Vol.			A D.R. J	
	Hole Size			(#/fL)	Тор (МІ		ш) <u> </u>	Depth	Type of	Cement	J. (E	<b>E</b> L)	Cement	·····	Amount Pulled	
	17 1/2"	9 5/8"		5	SURF	408°	48	0' 04'	425 CI 1025 "	ASS C	ļ		SURF		NONE	
	8 3/4"	7"		& 26	SURF	94501		<del></del>	1350				960'		NONE	
	6 1/4"	4 1/2'			9051'	10,119'	10.	,119'		ASS H			9051'-	TOL	NONE	
		ļ			,, , <del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>											
	24 Tubin	g Record	L						L	······································	L			· · · · · · · · · · · · · · · · · · ·		
	Size	~,	Set (MD)	Packe	r Depth (Mi	D) Size	Dep	th Set (MD)	Packer D	epth (MD	भ	Size	Depth	Set (MD)	Packer Depth (MD)	
	4 1/2" 25. Produ	7567	-1-	7567	•			Perforation			<u> </u>					
	23. Plocu	Formatio		—-г	Тор	Bottom	26.	Perforated		γ	Size	No. I	foles	<u></u>	Perf. Status	
	A) CIS	00			7650	8456	766	0' - 8450'		0.5		1580		2 JSPF		
		YON			8546'	8620	854	10'- 8620'		0.4	5**	160		2 JSPF	16 <b>6</b> 0	
	C) D)							· · · · · ·			•••••••••••	<del> </del>			<u> </u>	
		Fracture, Ti	restment, C	ement S	queeze, etc.		L	<del></del>								
	1	Depth Inter	<del></del>		****				mount and							
	7050' - 7				80 SKS P	REM 14.8 PPC	NEAT	CMT FOR	PERF S	QZ ON I	REVI	OUS PE	RFORA	TION		
,	7262' - 7 7364' - 7					Prem 14.8 PP Rem 14.8 PPG										
•										2		00011	20.0101	*******		
;		ction - Inte			7 22	1.0	1									
	Date First Produced	Test Date	Hours Tested	Product	ion BBL	GM MCF	Water BBL	Oil Grav Corr. Al	1 ·	Gas Gravity		Production NON-BLA:		lass i we	14.	
	Choke Size	Thg. Press. Flwg. SI	Cage. Presse.	24 Hr. Rete	Oil BBL	Gas MCF	Water BBL	Gus/Oil Rutio	.,	Well Stud	tos	WAITING	ON STAT	e approv	AL TO INSECT	
	28a. Proda														<del></del>	
	Date First Produced	Test Date	Hount Tested	Test Production	m BBL	Gas MCF	Water BBL	Oil Grav Cour. AP	iy I	Gas Gravity	Ţ,	roduction	Method		<u> </u>	
	Choke	Thg. Press.	Cage.	24 Hz.	Oil	Gas	Water	Gas/Oil		Well State		NON-BAI	AZOUS C	LASS I WE	ır	
	Size	Flwg.	Press.	Rate	BBL	MCF	BBL	Ratio		MCH OTHER	-					

WAITING ON STATE APPROVAL TO INJECT

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. Rato	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	Thg. Press. Plwg. SI	Csg. Presa.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well States			
29. Disposition of Gas (Sold, used for fuel, vented, etc.)											
N/A (NON-HAZARDOUS CLASS I WELL)											
30. Summary of Porous Zones (Include Aquifers):  31. Formation (Log) Markers											
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.											
F7	4:	Тор	Bottom		Descriptions, Contents, etc.				Name Top		
Formation		, cop	Double		гозитрины, солины, са.			Meas. Depth			
27 6 4 4 4 4											
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 7056' TO 7102', 7262' TO 7278', AND FROM 7384' 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:											
<ul> <li>✓ Electrical/Mechanical Logs (1 full set req'd.)</li> <li>✓ Geologic Report</li> <li>✓ DST Report</li> <li>✓ Directional Survey</li> <li>✓ Sundry Notice for plugging and cement verification</li> <li>✓ Core Analysis</li> <li>✓ Other:</li> </ul>											
34. Thereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*											
Name (please prins) Darrell Moore Title Env. Mgr for Water & Weister Signature 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											

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 UNITED STATES FORM APPROVED OM B No. 1004-0137 Expires: March 31, 2007 DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT** onth - Year 5. Lease Serial No. NW-0557371 MAR - 5 2007 SUNDRY NOTICES AND REPORTS ON WELL If Indian, Allottee or Tribe Name OCD - ARTESIA, NM Do not use this form for proposals to drill or to re-enter a abandoned well. Use Form 3160-3 (APD) for such proposals. 7. If Unit or CA/Agreement, Name and/or No. SUBMIT IN TRIPLICATE- Other instructions on reverse side. 1. Type of Well Oil Well Gas Well Other 8. Well Name and No. Wnw.3 2. Name of Operator NAVAJO REFINIG COMPANY API Well No. 30 - 015 - 26575 3a Address 3b. Phone No. (include area code) P.O. BOX 159, ARTESIA, NM 88211 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 11. County or Parish, State SI - T18S - R27E; 798' FROM THE SOUTH LINE AND 2250' FROM THE WEST LINE EDDY 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Acidize Production (Start/Resume) Deepen Water Short-Off Notice of Intent Alter Casing Well Integrity Fracture Treat Reclamation Casing Repair Other Subsequent Report New Construction Recomplete Change Plans Plug and Abandon Temporarily Ahandon NON-HAZARDOUS 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 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 7959' TO 7102', 7262' TO 7278', AND FROM 7384' TO 7314'. 10/13/06 - RAN CBL/VDL AND TEMPERATURE SURVEY, PERFORATED INTERVAL FROM 7650' TO 8450' AND FROM 8540' TO 86201. 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'. 11/4/96 - PERFROMED AN INJECTION/FALLOFF TEST ON THE WELL AT 9 TO 10 BPM. 11/15/86 - MECHANICALLY INTEGRITY TEST WERE PERFORMED AND WITNESSED BY THE OCD. THE MECHANICALLY 11/15/96 - MECHANICALLY INTEGRITY TEST WERE I REPORTED IN AN ANNULUS PRESSURE TEST. SUBJECT TO LIKE I hereby certify that the foregoing is true and correct Name (Printed/Typed) Title 1/24 Date THIS SPACE FOR FEDERAL OR STATE OFFICE HEEPTED

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 representations as to any matter within its jurisdiction.

2 8 2007

PETROLEUM ENGINEER

FEB

SEE ATTACHED FUR CONDITIONS OF APPROVAL

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

(Instructions on page 2)

#### **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**

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## 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

Form 3166 (April 20	)-4 04)					TED STA		****	•	£1.5		1		EODNA A	PPROVED	
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Form	nation	Тор	Bottom		Desc	riptions, Cont	ents, etc.		Name	Top Meas. Depth
32. Addin	ional remar	ks (include	pługging pr	ocetiure):						
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34. Therei	by certify th	at the fore	going and att	ached infor	mation is co	emplete and c	orrect as determined	from all availat	e records (see attached instructions)	
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(Form 3160-4, page 2)

### 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 bonding (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.

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## **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.



## 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.

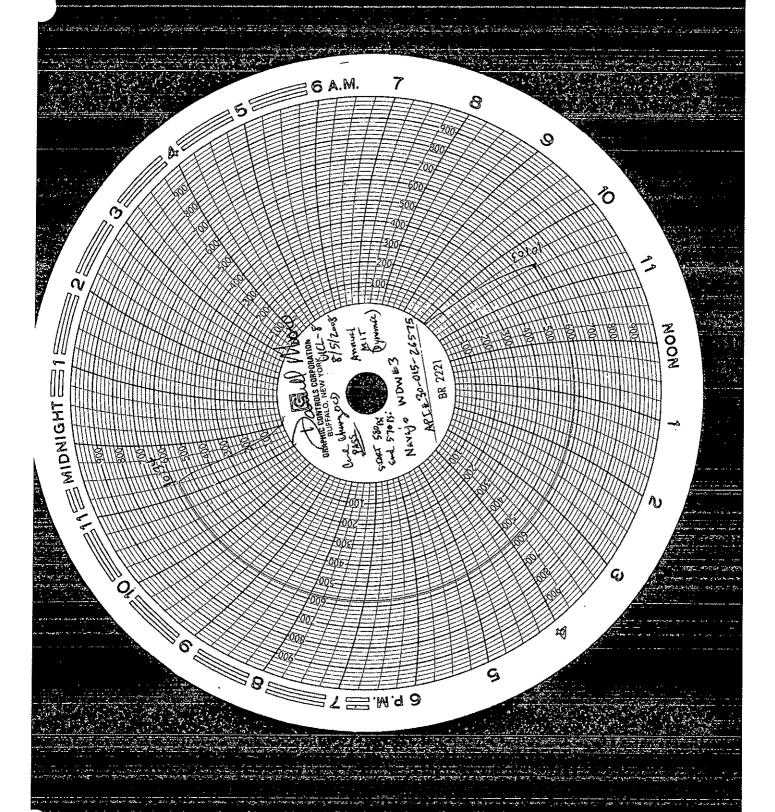
Iodine 131 was then ejected at a depth of 7375' and pumped down the tubing and into the permitted interval. Overlapping logging passes tracked the R/A tracer material as it moved down in the wellbore. The R/A material was seen traveling down the tubing, past the packer, and exiting the permitted injection interval.

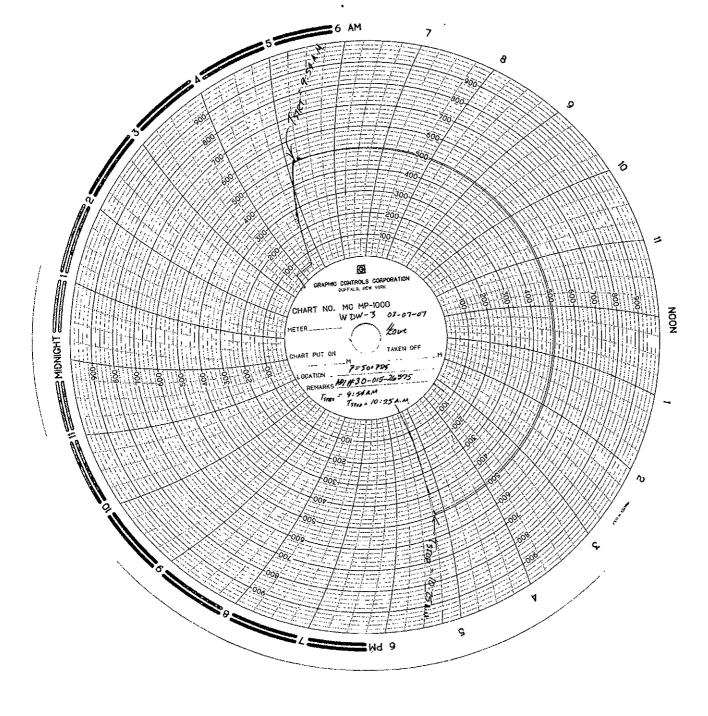
The flow profile log was then repeated and this survey also showed R/A material going out into the permitted interval.

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



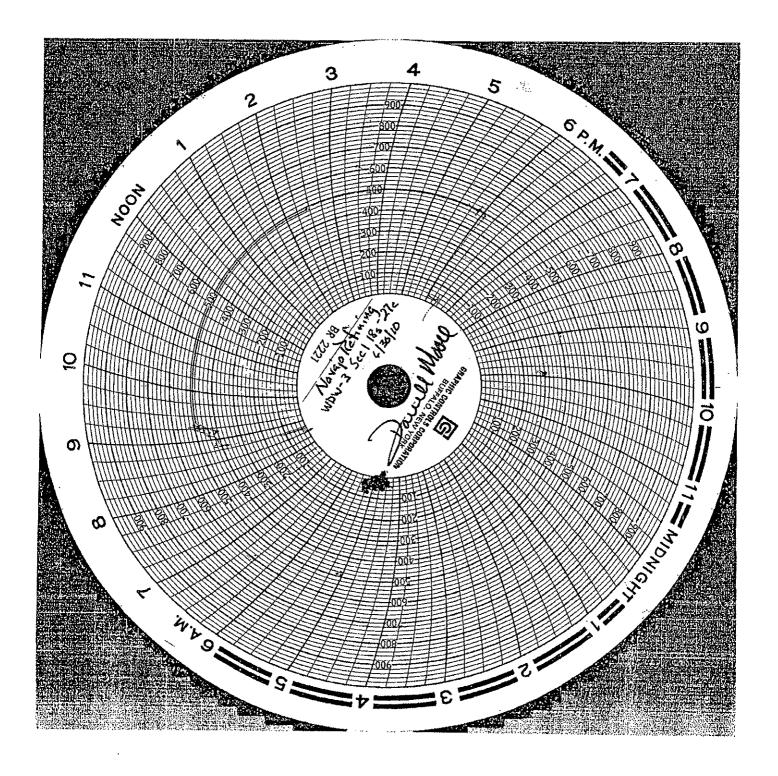


## Oil Conservation Division, Environmental Bureau C/O: Carl Chavez 1220 South St. Francis Drive Santa Fe, New Mexico 87505

## **BRADENHEAD TEST REPORT**

(Submit 2 copies to above address)

Date of 7	est June 30	, 2010	Operator_N	lavajo Refining	API #30-0 15-26	5575
• •	Name WDW Injectus (Shut-In or	ting		Location: Unit 0		- ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
OPEN	BRADENHEAI	AND INTERME	DIATE TO	ATMOSPHERE IND	IVIDUALLY FOR 15	MINUTES EACH
TIME	BRADENHEAD	PRESSURES: INTERMEDIATE	CASING	-	BRADENHEAD FLOWED	INTERMEDIATE FLOWED
5 minutes	0	0		Steady Flow	N/A	N/A
10 minutes	N/A	N/A		Surges	N/A	N/A
15 minutes	N/A	N/A		_ Down to Nothi	ng immediately	immediately
20 minutes	N/A	N/A		Nothing	x	X
25 minutes	n/a	N/A		Gas	N/A	N/A
30 minutes	N/A	N/A		_ Gas & Water_	N/A	N/A
				Water	N/A	N/A
If bradenh	ead flowed water	r, check all of the de	scriptions (	hat apply below:		
Cì	EARFI	RESHSAL	TY	SULFUR BLAC	CK	
5 MINUTI	E SHUT-IN B	RADENHEAD 0		INTERMEDIATE 0	······	
REMARKS		urface and int	ermediat	e bradenheads wer	re onened one of	s time Roth
				he vqalve (from h		
		No pressure.				
By Dar	rell Moore	Daull	Moore	Witness		
	osition)	Nater & Waste	Navajo 1	Refining		
E-mail addı	essdarrell.mc	ore@hollycorp.	соп			



## Chavez, Carl J, EMNRD

From:

Moore, Darrell [Darrell.Moore@hollycorp.com]

Sent:

Friday, March 05, 2010 8:51 AM

To: Subject: Chavez, Carl J, EMNRD 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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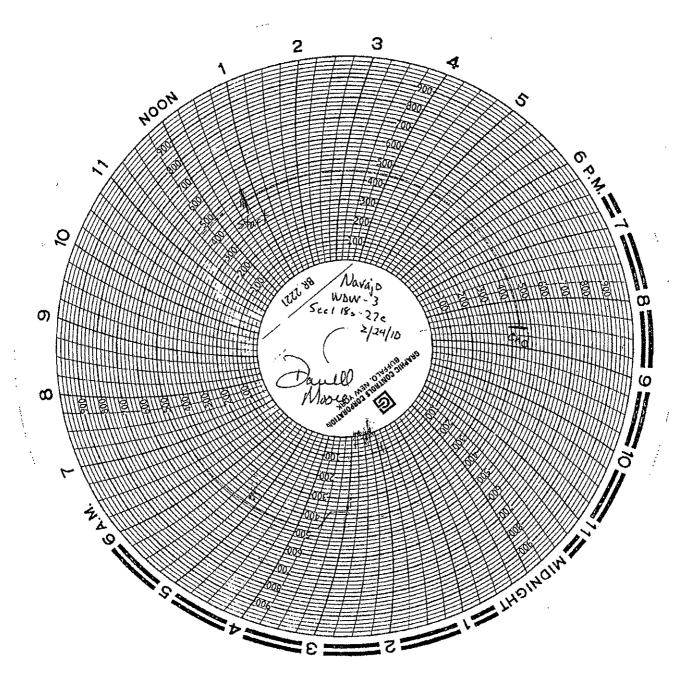


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## Chavez, Carl J, EMNRD

From: Sent:

Chavez, Carl J, EMNRD

Tuesday, July 06, 2010 9:04 AM

To: Subject: 'Moore, Darrell' 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

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## 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 3	0; 2010 C	perator_Na	avajo Refining	API #30-0 15-26	6575
Property Name WDW Inje Well Status (Shut In or	cting		Location: Unit 0 S		
OPEN BRADENHEA	D AND INTERMEI	DIATE TO	ATMOSPHERE INDIN	VIDUALLY FOR 15	MINUTES EACH
TIME BRADENHEAD	PRESSURES:  INTERMEDIATE	CASING		BRADENHEAD FLOWED	INTERMEDIATE FLOWED
5 minutes 0	0	! :	Steady Flow	N/A	N/A
10 minutes N/A	N/A		Surges	N/A	N/A
15 minutes N/A	N/A		Down to Nothin	g <u>immediately</u>	immediately
20 minutes N/A	N/A		Nothing	X	×
25 minutes N/A	N/A		Gas	N/A	N/A
30 minutes N/A	N/A		Gas & Water	N/A	N/A
			Water	N/A	N/A
If bradenhead flowed water	er, check all of the de	scriptions tl	hat apply below:		
CLEARF	RESH SALT	TY	SULFUR BLACK	<b>.</b>	
5 MINUTE SHUT-IN E	BRADENHEAD 0	<u> </u>	INTERMEDIATE 0		
REMARKS: Both the	surface and inte	ermediate	bradenheads were	onenad one at	a tima Roth
			ne vgalve (from he		
	No pressure.	pening cr	ie valve (from me	sat barra-up) ai	nd then nothing.
	NO PIESGUIE.		· · · · · · · · · · · · · · · · · · ·	<del> </del>	
By Darrell Moore	100/	Dooce	Witness		· · · · · · · · · · · · · · · · · · ·
	Water & Waste		***************************************		
E-mail address darrell.m	oore@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: F Attachments: W

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

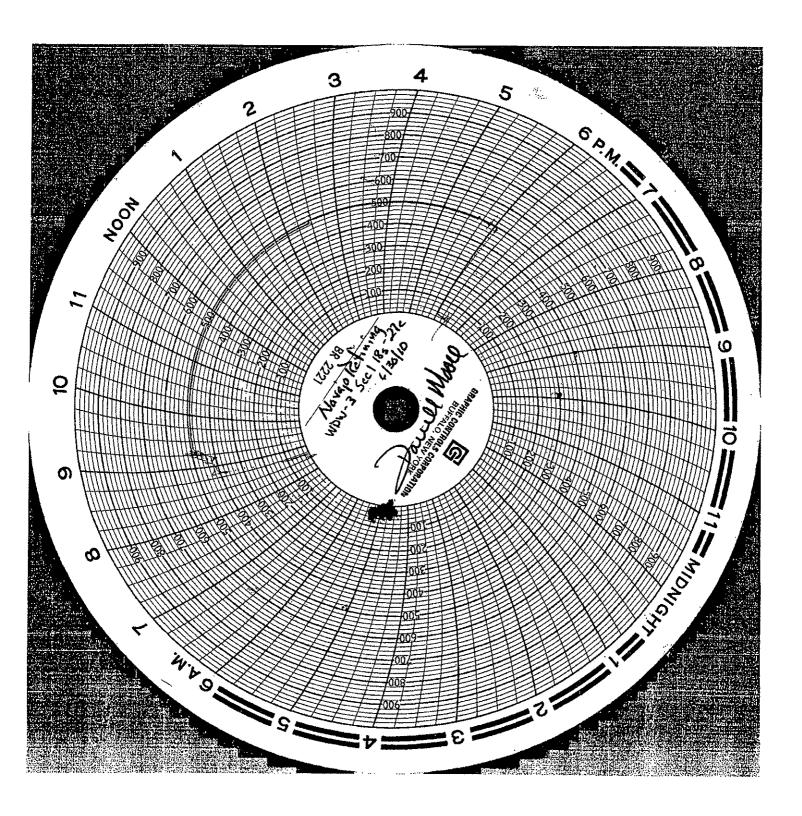
Sent: Wednesday, June 30, 2010 1:44 PM

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

CONFIDENTIALITY NOTICE: This e-mail, and any attachments, may contain information that is privileged, proprietary and/or confidential. If you received this message in error, please advise the sender immediately by reply e-mail and do not retain any paper or electronic copies of this message or any attachments. Unless expressly stated, nothing contained in this message should be construed as a digital or electronic signature or a commitment to a binding agreement.



Submit I Copy To Approp Office		State of New Mo		•	Form C-103
<u>District I</u> – (575) 393-6161 1625 N. French Dr., Hobb		gy, Minerals and Nati	ıral Resources	WELL API NO.	Revised August 1, 2011
District II - (575) 748-128	3	. CONSERVATION	IDIVISION	30-015-26575	
811 S. First St., Artesia, N District III - (505) 334-61		1220 South St. Fra		5. Indicate Type of	
1000 Rio Brazos Rd., Azte	c, NM 87410	Santa Fe, NM 8		STATE STATE	
<u>District IV</u> – (505) 476-34- 1220 S. St. Francis Dr., Sa 87505		,	, 505	6. State Oil & Gas NM-0557371	Lease No.
(DO NOT USE THIS FOR DIFFERENT RESERVOIL	NDRY NOTICES AND IM FOR PROPOSALS TO DR R. USE "APPLICATION FOR	ILL OR TO DEEPEN OR PL	UG BACK TO A	7. Lease Name or U Gaines WDW-3	Jnit Agreement Name
PROPOSALS.)  1. Type of Well: Oil	Well Gas Well	Other Injection W	/ell	8. Well Number W	DW-3
2. Name of Operator				9. OGRID Number	•
Navajo Refining Co 3. Address of Operat				10 Pool name or U	Vildcat: Navajo Permo-
	Artesia, New Mexico 8	8211		Penn	viideat. Navajo Permo-
4. Well Location				·	
Unit Letter_	<u>N</u> : 790	feet from the _ <u>South</u>	***************************************		
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I hereby certify that the information above is true and complete to the best of my knowledge and belief.	
SIGNATURE Trysthy Gones TITLE Project Engineer D.  Type or print name Timothy Jones E-mail address: Hones@ Subswfacegroup. Cor pp.  Tor State Use Only	ate 10/3/2011 Hone: <u>7/3</u> -880-4 <b>6</b> 40
APPROVED BY: <u>Cart</u> J. Conditions of Approval (if any).  Sur &-mil conditions dut d 10/1912011 attack	ind fo wow-1.

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## Chavez, Carl J. EMNRD

rom:

Chavez, Carl J, EMNRD

خent:

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

Vebsite: 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	State of New Me	exico	Form C-103
District I - (575) 393-6161	Energy, Minerals and Nati	ural Resources	Revised August 1, 2011
1625 N French Dr., Hobbs, NM 88240 <u>District II</u> – (575) 748-1283	044 604 (677)		WELL API NO. 30-015-26575
811 S First St, Artesia, NM 88210	OIL CONSERVATION		5. Indicate Type of Lease
<u>District III</u> – (505) 334-6178 1000 Rio Brazos Rd , Aztec, NM 87410	1220 South St. Fra		STATE FEE
District IV - (505) 476-3460	Santa Fe, NM 8	7505	6. State Oil & Gas Lease No.
1220 S St. Francis Dr., Santa Fe, NM 87505			NM-0557371
(DO NOT USE THIS FORM FOR PROPODIFFERENT RESERVOIR USE "APPL	TICES AND REPORTS ON WELLS OSALS TO DRILL OR TO DEEPEN OR PL ICATION FOR PERMIT" (FORM C-101) F	UG BACK TO A	7. Lease Name or Unit Agreement Name Gaines WDW-3
PROPOSALS)  1. Type of Well: Oil Well	Gas Well Other Injection W	/eil	8. Well Number WDW-3
2. Name of Operator	one non El one injection in		9. OGRID Number
Navajo Refining Company			- Control Manage
3. Address of Operator	** !		10. Pool name or Wildcat: Navajo Permo-
Post Office Box 159, Artesia, Ne	w Mexico 88211		Penn
4. Well Location			
Unit Letter N:	790 feet from the South		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 N	latura of Matica	Donart or Other Date
12. Check	Appropriate Box to indicate N	lattire of Notice,	Report or Other Data
NOTICE OF IN	NTENTION TO:	SUB	SEQUENT REPORT OF:
PERFORM REMEDIAL WORK		REMEDIAL WOR	
TEMPORARILY ABANDON   TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRI	
PULL OR ALTER CASING	MULTIPLE COMPL	CASING/CEMEN	I JOB
DOWNHOLE COMMINGLE			
OTHER: PERFORM PRESSURE	FALLOFF TEST	OTHER:	
OTHER: PERFORM PRESSURE			_
OTHER: PERFORM PRESSURE  13. Describe proposed or comp	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAG	pertinent details, and	d give pertinent dates, including estimated date npletions. Attach wellbore diagram of
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SIGNATURE Ting thy	Jones TITLE Project	Engineer DATE	10/3/2011
ype or print name Timethy	Land .	C Subsurface group. or PHONE:	713-880-4640
APPROVED BY:Conditions of Approval (if any):	TITLE	DATÉ	

I hereby certify that the information above is true and complete to the best of my knowledge and belief.



## NAVAJO REFINING COMPANY Map ID No. ☐ Artificial Penetration Review

<del>/</del>			
OPERATOR BP	America Prod.	STATUS	Plugged
LEASE Empin	2 ABO Unit		Sec. 1T18S-R27E
WELL NUMBER	17A		BOREHOLE NA
DRILLED3-			ECTION ZONE $\sim$ 722 $1'$
PLUGGED12-	01-08		<u>0-015- 00703</u>
REMARKS:			
	PIL	19:10-1566' u	) 175 sx
	85	1/8" @ 1470' W/-	750 sx
	77777777 Plug: 31	152'-3416' W/25	≤x
	CIBPO	5420' w/plug 51	420'-5179' WZS sx
	CIBP@	5770' w125' cn	ot on top
	,	low cut in 5½"	© 5797'-5803'
C1BP@5823' Perfs: 6040'-6080' = 5½"@6137'W1000_5x			
Or	ig TD: 6137'		
		Directional	TD: 7705'

NOTICE OF INTENTION TO DR	іЦ	SUBSEQUENT REPORT OF WA	TER SHUT-OFF	
NOTICE OF INTENTION TO CHA	i ii	SUBSEQUENT REPORT OF SHO		1 1
NOTICE OF INTENTION TO TES	ST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALT	TERING CASING	
NOTICE OF INTENTION TO RE-	DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-	DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHO	OOT OR ACIDIZE	SUBSEQUENT REPORT OF ABA	ANDONMENT	
NOTICE OF INTENTION TO PUI	LL OR ALTER CASING S	SUPPLEMENTARY WELL HISTO	ORY	
NOTICE OF INTENTION TO ABA	ANDON WELL			
[ <del></del> (	(INDICATE ABOVE BY CHECK MARK NATUR		THER DATA)	
HEL WIT AN DEPTWEE	water Ba	win	Pebruary 16	1058
USA NALCO REFINER			SOLARLY TO	, 1922.
Vell No 1 is	located 1980 ft. from S	line and 660 ft.	from E line of s	sec. 1
		,	(W) or .	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
/L SW/L Section 1 (1/2 Sec. and Sec. No.)	13 - 5 27 (Twp.) (Range)	(Meridian	, WE	
Underignated_	AND IN IN		New Mencion	
		vision)	(State or Territory)	
(Field) Engets Color	Ex.# 1		<b>U.</b> S. U.U	and
State names of and expected de	errick floor above sea level is  DETAILS Coppers to objective sands; show sizes, weighting points, and all other im-	OF WORK white, and lengths of proposed proposed work)		
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State names of and expected de We propose to dri 6200' to test the Size of Hole	DETAILS Coppets to objective sands; show sizes, weighing points, and all other im the above well with Abo. Casing program Size of Casing	OF WORK  when the proposed work  rotary tools to  will be as followed.	d casings; indicate mudding an approximatows;  Cement  Circulate	e depth o
State names of and expected de We propose to dri 6200' to test the Size of Hole 11 7-7/8	DETAILS Copper to objective sands; show sizes, weighing points, and all other impoints above well with a above casing program and size of Casing 3-5/8	OF WORK  this, and lengths of proposed portant proposed work)  rotary tools to will be as follo  Depth  950	d casings; indicate mudding an approximatows;  Coment Circulate 100 sacks	e depth o 2% Gel vi
State names of and expected de We propose to dri 6200' to test the Size of Hole  11  7-7/8  NOTE: Please ins	DETAILS Coppers to objective sands; show sizes, weighing points, and all other in the above well with a Abo. Casing program 5 320 of Casing 3-5/8 5-1/2 cert lease master.	OF WORK  when the proposed work to the proposed work to the proposed work to the proposed will be as fellowed by the proposed will be as fellowed by the proposed will be as fellowed by the proposed with the proposed will be as fellowed by the proposed will be as fellowed by the proposed will be as fellowed by the proposed by the proposed by the proposed will be as fellowed by the proposed by the proposed work to the proposed	d casings; indicate mudding an approximations;  Generat  Girculate 100 sacks	e depth o 2% Gel wi neat on b
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GPO 9 18 507

#### FORM C-128 NEW MEXICO OIL CONSERVATION COMMISSION Revised 5 1/57 WELL LOCATION AND ACREAGE DEDICATION PLAT SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE SECTION A Operator U.S.A. Malco Refineries F Pan American Pet. Corp. Unit Letter Section County Township 27 E Eddv 18 S 1 Actual Footage Location of Well 660 West 1980 South feet from the line and feet from the line Ground Level Elev. Producing Formation Dedicated Acreage Abo Empire Abo 70 Acres 1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES NO \_\_\_\_\_. ("Cluner" 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 (omp.) another. (65-5-29 (e) NAMA (correspondence) 2. If the answer to question one is "no," have the interests of all the owners been consolidated by communication of the correspondence of the correspond wise? 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 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 BROWN Ridld Superintendent Company Pan American Petroleum Corp February 16, 1959 I hereby certify that the well location shown on the plat in SECTION Is was -660'--O 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.

2000

1500

1000

500

330 660 990 1320 1650 1980 2310 2640

Date Surveyed

2-10-59

Registered Professional Engineer and or Land Surveyor, JOHN W. WEST

N. M. - PE & L.S. NO. 676

## JOHN W. WEST ENGINEERING COMPANY

412 NORTH DAL PASO HOBBE, 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.J.A., 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

FEB1 8 1959

U. J. GLOCOGISTA CHE ARTESIA, NEW MEXES

# NE MEXICO OIL CONSERVATION COM ASSION Santa Fe, New Mexico

(Form C-104) Revised 7/1/57

## REQUEST FOR (OIL) - //F/AF//ALLOWABLE

New Well

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.

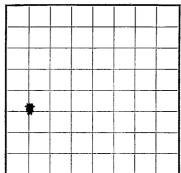
			•	Hobbs, New Mexico April 24, 195
				(Place) (Date)
				ING AN ALLOWABLE FOR A WELL KNOWN AS:
Americ	Comme	Trolen	m Corp.	- Malco Refineries "F" , Well No. 1 , in WW 1/4 SW 1/4
Ĭ	Compar	, Sec	1	(Lesse) , T. 18 S , R. 27 E , NMPM., Empire Abo Poc
Unit E	Letter Eddy			County Date Spudded 3-26-59 Date Drilling Completed 4-20-59
		dicate lo		Elevation 3581 RDB Total Depth 6137 PBTD 6101
D	C	В	A	Top 011/94 Pay 5460 Name of Prod. Form. Abo PRODUCING INTERVAL -
E	F	G	н	Perforations         6040-6080 with 2 shots per foot           Open Hole         —         Depth Casing Shoe         6137         Depth Tubing         6077
				OIL WELL TEST -
L	K	J	I	Choke Natural Prod. Test:bbls.oil,bbls water inhrs,min. Size
M	N	0	P	Test After Acid of for the Treatment (after recovery of volume of oil equal to volume of Choke load oil used): 82 bbls,oil, no bbls water in 24 hrs, min. Size 10
•				GAS WELL TEST -
e. 1,	T_1A	S. R-2	7-K	·
190	805-	6600	7	Natural Prod. Test:MCF/Day; Hours flowedChoke Size
Size		and Gemei Feet	nting Recor	•
				Test After Acid or Fracture Treatment: MCF/Day; Hours flowed
8-5/	/8 1	468	750	Choke Size Method of Testing:
5-1/	/2 6	167	1000	Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and
2-3/	/0 /	000		sand): Acidized with 500 gallons 15% regular  Casing Tubing Date first new
2-3/	6	077		Casing PKR Tubing Date first new Press. 725 oil run to tanks 4-20-59
				Oil Transporter Malco Refineries Inc.
				Gas Transporter
Remarks	:	•••••		• • • • • • • • • • • • • • • • • • • •
I he	ereby c	ertify tha	it the info	ormation given above is true and complete to the best of my knowledge.
Approve	d	,		PAN AMERICAN PETROLEUM CORPORATION  (Company or Operator) Original Signed (Company or Operator) Original Signed (Company or Operator)
,	OIL C	ONSER	VATION	COMMISSION By: (Signature)
Ru. /	MS	( True	estro	Title Superintendent
	·/······	Sa. Va. A. K. K. K. S	7	Send Communications regarding well to:
Title	••••••	•••••••••	y	NameJ. W. Brown
				Box 68 - Hobbs, New Mexico
				COMMA PROFESSIONAL

# NEW M ICO OIL CONSERVATION CO 4ISSION Form C-110 SANTA FE, NEW MEXICO 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 Oper	ator Pan Americ	an Petroleum	Corporation	LeaseMal	co Refineries "F"
Well No. 1	Unit Letter_	<u>r</u> s <u>1</u>	18 SR 27 EP	ool <u>Undesignat</u>	ed
County <b>Eddy</b>	K	and of Leas	e (State, Fed. o	r Patented)	ederal
If well produces of	oil or condensat	te, give loca	tion of tanks:U	nit <b>F</b> _S_1_	T 18 SR 27 E
Authorized Trans					
4.13 m 44a		50 B			
Address <u>Box 660</u> (Give	address to wh	ich approved	copy of this fo	rm is to be se	ent)
Authorized Trans					
Address	_				
Address(Give	address to wh	ich approved	d copy of this fo	rm is to be se	ent)
lf Gas is not bein	g sold, give re	asons and al	lso explain its p	resent disposi	ition:
Vented pending	market arrange	nents.			<del></del>
		•			
		.,			
Reasons for Filir	D1	lı munnan ha	Wall		
Change in Transp	orter of (Check	c One): Oil	( ) Dry Gas (	) C'head ( ) (	Jondensare ( )
Change in Owner	shin	(	) Other		( )
Change in Owner Remarks:	5111P		, , , , ,	ive explanatio	n below)
Kemarks.					
The undersigned mission have bee	certifies that t	he Rules and	l Regulations of	the Oil Conse	ervation Com-
Executed this the	24th day of	April .	19 <u>59</u>		
			Ву		
					Original Signed by J. W. BROWN
Approved	38	19	Title Fie	ld Superintende	ent ". ". BRUWLY
OIL CONSI	ERVATION COI	MMISSION	Company_	Pan American I	etroleum Corporat
By MLC	Trustron	ig	Address	Box 68	
TP:41 -	$\nabla$	<u></u>		Habbs Now Mor	ri aa



UNITED STATES

OF THE INTERIOR

GEOLOGICAL SURVEY

## LOG OF OIL OR GAS WELL

LOCA	ATE WEL	L CO	RRECTLY	_			•				, <u> </u>	<del></del>
-					m Corp.					Hobbs,	New Me	xico
Lessor o	or Tract	_us	A Malco	Refine	ries "P"	Fie	ld	Empire	Abo	. State	Nev	Mexico
					. <b>27E</b> Mei					v	Eddy	
Location	n <b>1980</b>	$\mathbf{ft}.\left\{  ight.  ight.$	$\left. rac{\mathbf{N}}{2}  ight\}$ of	S_ Line a:	nd - <b>660</b> ft	$\left\{ \begin{bmatrix} \mathbf{E}_{\cdot} \end{bmatrix} \right\}$ of $_{-}$	₩L	ine of	Sect	ion 1	Eleva	ation 3581
$\operatorname{Th}$	e inform	ation	given h	erewith is	s a comple railable rec	te and co cords.	rrect		the wel	ll and al	Priginal W	floor relative to sea level)
Date		Ap	ril 23,	1959				$\operatorname{Title}$	Fi	<b>eld</b> Suj	pe <b>rin</b> t	endent
The	e summa	ry o	n this pa	ge is for t	he conditi	on of the	well a	t above da	ite.			
Comme	nced dri	lling		3-26	<del>=</del> , 19	<b>.59</b> Fi	$\mathbf{nished}$	drilling -			4-20-	, 19 <b>59</b>
				OI	L OR GA	S SAND		ZONES				
No. 1, fa	rom	60	40	_ to6	080	No	o. 4, fr	om		to	)	
No. 2, fa	rom			to		No	No. 5, from to					
No. 3, fa	rom			_ to		No	o. 6, fr	om		to	)	
				I	MPORTA	NT WAT	ER S	ANDS				
No. 1, fa	rom			to		No	o. 3, fr	om		to	)	
No. 2, fi	rom		<del>-</del>	. to		No	o. 4, fr	om		to	)	
				-	CAS	ING REC	CORD	)	1		<u> </u>	
Size casing	Weight per foot	Th	reads per inch	Make	Amount	Kind of sh	noe C	ut and pulled from		Perforated To—		Purpose
0-5/0 5-1/2	24. 24. <b>11.</b> 1	1 75 E E	Tengeliji Teneri	J-55	J.66	Floa 7 Floa	t	ren dy cymi ial nasdy po	ted, giv	ren Kerle	e:-po	mad Surface
()	wither.cc	र्युक्तारा -	ារស្រស់ព្រះ ភព <b>ុ</b> ជ្ជា		sampled to		**************************************	Pleast stare side to the	<u>ांग वेद्</u> या ट्यासंगर	il the date	s of redri	lling, together
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				MUDD	ING ANI	CEME	VTIN	G RECOR	SD		<u>'                                    </u>	
Size easing	Where se	et	Numbe	er sacks of ce	sacks of cement Meth		nod used Mud gravity		rity	Amount of mud used		
8-5/8	-5/8 3470			750			HOWGO					
J-4-1												
Heaving	1				]							
Auspiers	s—mrațe	1141		<del></del>		Size TING RI		<b>.</b> D	<u>-</u>			
Size	Shell used		i	Explosive used		Quantity Da				Depth cleaned out		ned out
				**			<b>-</b>					

Cable tools were			feet, and from				
Compl The produ	teted April 21 ction for the first	<sup>19</sup> <b>59</b>	Put to producing				
	% water; and		Gravity, °Bé42°				
			Gallons gasoline per 1,000 cu.				
		n	1 , , , , , , , , , , , , , , , , , , ,				
_		EMPI	LOYEES				
B. J.	Wright	, Driller	R+ B M	- <b>E.</b> , Driller			
J. W	Martin	, Driller	W. F. Tadlock , Dri				
			ON RECORD				
FROM-	то-	TOTAL FEET	FORMATIO	N	<u> </u>		
0 387 600 1025 1463 1521 4809 4822 4844 4911 5557	387 600 1025 1463 1521 4809 4822 4844 4911 5557 6137	387 213 425 438 58 3288 13 22 67 646 580	Red Bed, Anhy. Anhy., Gyp Anhy., Lime Lime Lime Lime Lime Dolomite Lime Lime Lime	TOPS San Andres Glorieta Abo Reef	- 1830 - 3220 - 5460		
		100	VER)		3094-4		

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 it 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 shorts. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

See Bo, no water in St hire. (85.3 MT) perforated 600.01-60801 w/s shots per floor sad for sad fill of the sad fill of the sad fill of the sad fill of the sad fill of the sad fill of the sad of the sad fill of the sad of

Grand British Color Profit Adequation and

Original Signed by YHUSS AL &

1 1996 5.17

Page 1

## FORMATION RECORD—Continued

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	FORMATION	TOTAL FEET	—ОТ	EBOM-

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:

Order K-1397, your Malco Refineries "F" No. 1

cil well in Unit 1 of Section 1, Township 18 Secret, Range 27

East, which is currently listed in the "Undesignated Section" of the Proration Schedule, will appear in the Pool in the

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 1 XICO OIL CONSERVATION CC 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 MY 85%

Company or Opera	tor Pan American Petroleu	m Corporation	Lease_	Malco Rafineries "F"	i
Well No. 1	Unit Letter L S 1	T <u>18</u> R 27 I	Pool Kar	otre Abo	
	Kind of Leas	e (State, Fed.	or Patent	ed) Federal	
Authorized Trans	porter of Oil or Condensat	e <u>Continental</u>	Pipe Line	Company	
Address(Give	address to which approve	Box 367. Az	<b>tesia. New</b> form is to	Mexico be sent)	
Authorized Trans	porter of Gas				
Address(Give	address to which approve g sold, give reasons and a	ed copy of this	form is to present d	be sent) isposition:	•
	erket arrangements				
					_
Reasons for Filin Change in Trans	ng:(Please check proper be porter of (Check One): Oil	ox) New We	ell() C'head	d() Condensate()	
Change in Owner Remarks:	ship(	) Other Che	Give expl	orter ( ) anation below)	-
Filed to change effective May 1,	transporter from Malco Ref , 1959•	ineries Inc. to	Continent	al Pipe Line Company	
The undersigned mission have be	certifies that the Rules are complied with.	nd Regulations	of the Oil	Conservation Com-	
Executed this th	e <u>loth</u> day of May	1 <b>959</b>		al Signed by Z. BROWN	-
Approved_	AY 2 5 1959 19_	Title	rea Superi	ntendent	-
OIL CONS	ERVATION COMMISSION	Compa	ny Pan Ame	rican Petroleum Corpo	ratio
By Miler	metrong	Addres	s Box 68	- Hobbs, New Mexico	
Title <b>Gal Alb</b> i	S SAE IFBRECTES				

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# NEW MEXICO OIL CONSERVATION COMMISSION Revised 7/1/55 SANTA FE, NEW MEXICO

Form **C-110** 

(File the original and 4 copies with the appropriate district office)

# CERTIFICATE OF COMPLIANCE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

CHILDWIN	or Operator_	Pan Americ	an Petroleu	m Corp	oration_	Lease Male	O MATTER	
ell No.		nit Letter_				ool <b>Empire</b>	Abo	
en 140		•			. 17-4 -	. Datented)	Fede	ral
ounty	Eddy	K	ind of Leas	e (Stat	e, rea. o	r Patented)_		
well pro	oduces oil or	condensat	e, give loc	ation o	i tanks: U	nit		
uthorize	d Transport	er of Oil or	Condensat	te	tinental	ipe Line Com	O A NY	<del></del>
	Box 367	Artesia	. Hew Mexico	•				
ddress_	(Give add	ress to whi	ch approve	d copy	of this fo	rm is to be	sent)	
uthorize	d Transport							
						Date Connec	ted	
	(Cive add	reas to whi	ch approve	d copy	of this fo	rm is to be	sent)	•
Gas is	not being sol	d, give rea	sons and a	lso ex	plain i <b>ts</b> p	resent dispo	sition:	
	ending market							
, <u></u>						`		
			•	· ·				
20000	for Filing:(P	lease chec	k proper bo	ox)	New Well			_( )
Thanga it	Transporte	r of !Check	One): Oil	( ) D	ry Gas 1	) C'head (	Condens	ate ( )
Juange II	1 11ansporte							
Change in	n Ownership		(	) 01	ther Char	ge Pool Desi	mation	<u>(X)</u>
Remarks					, (	Give explanat	ion perow	•
	o show pool	dosignation	as Empire	Abo.		*		
	o show pool	iosignation	as Empire	Abo.		*.		
	o show pool (	d <b>esignatio</b> n	as Empire	Abo.				
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filed t					ulations o	f the Oil Cor	servation	Com-
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Filed t	rsigned cert have been co	ifies that t emplied wit	he Rules at h.	nd Reg	59	Original J. W.	Signed <b>by</b> BROWN	Com-
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ACT	- METELIC	TOFFICE
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Transporter		
File	1	

Post Office Box 68 Hobbs, New Mexico

April 16, 1959

Pile:

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 Pe, 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 feat from the south line and 660 feet from the west line of Section 1, T-18-5, 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 6-1/20 which was the first deviation recorded above 5°. Since that depth the deviation has varied between 6-1/4° and 6-1/20 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 analyse 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 horisontal 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 that line for this 660 foot location.

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 It is therefore respectfully requested that Pan American Petroleum Corporation be granted an exception to Rule III 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

Ву:

ee: Mr. M. L. Armstrong New Mexico Oil Conservation Commission Artesia, New Mexico is in therefore respectfully requested that Pan American Polition in the creation described a constant of granted a constitution to doly till for remains a directional curve, on their fill Africa definitions with mo. 1. Your carry consider class of the request will be almostally approvious as it is articlested that armitical operations will be completer by april 15, 1950.

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oc: Pr. L. L. Arestrong New Alexico USI Conservation Courtlesson Artesia, New Hoxico

# DEVIATION SURVEYS USA MALCO REPUBLIES "F" NO. 1

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5001	5001	3/40	6.551	6.55
9701	4701	3/40	6.151	12.70'
1350'	3801	3/40	4.971	17.67'
18501	5001	1-3/40	15.271	32.941
20501	2001	2 <sup>0</sup>	6.981	39.921
23801	3301	1-1/20	8.641	48.561
29701	5901	1-3/40	18.02'	66,581
34101	4401	2-3/4°	21.11'	87.691
37451	3351	3-1/20	20.451	108.14'
40501	3051	3-1/ <b>2°</b>	18.62'	126.761
43501	3001	4-1/2°	23.451	150,21
45551	2051	4-3/40	16.98	167.19'
46501	951	4-3/49	7.87'	175.061
48051	155'	6-1/2°	17.551	192.61
49901	185'	6-1/2°	20.941	213.551
5115'	125'	6-1/40	13.61'	227.16
52451	130'	6-1/40	14.15'	241.31'
53801	135'	6-1/2°	15.281	256.591
55001	1201	6-1/20	13.58'	270.17'

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# OIL CONSERVATION COMMISSION P. O. BOX 871 SANTA FE, NEW MEXICO

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

# OF CONSERVATION COMMISSION TO BOX TO SANTA PL. NEW MEDICO

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# NEW ME CO OIL CONSERVATION CON SSION 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 1959 TO TRANSPORT OIL AND NATURAL GAS

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# NEW MEXICO OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

Form **G-110** Revised 7/1/55

(File the original and 4 copies with the appropriate district office) F F F

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

SEP 9 1959

ompany or Operator Pan American Petroleum	Corporation Lease USA Malco Refineries ?
Vell No. 1 Unit Letter Y S 1 T	
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well produces oil or condensate, give locati	ion of tanks: Unit F S 1 1 165 A 4 5
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The undersigned certifies that the Rules and mission have been complied with.  Executed this the	19 59
	By J. W. BROWN
Approved SEP 1 0 1959 19	
OIL CONSERVATION COMMISSION	Company Pan American Petroleum Corporat
By Millrondrong	Address Bex 68 - Hebbs, Mi
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OIL CONSERVATION COMMISSION ARTESIA DISTRICT OFFICE No. Copies Received 36 PROPE STARLER U. S. G. ...

## HEW MEXICO OIL CONSERVATION COMMISSION

Form C-110

SANTA FE, NEW MEXICO

Revised 7/1/55

[File the original and 4 copies with the appropriate district Riffed E I V E D NAME CHANGED: FROM: PAN AMERICAN SERTIFICATE OF COMPLIANCE AND AUTHORIZATIOSEP 1 9 1960
TO: AMOCO PRODUCTION CO. TOTRANSPORT OIL AND NATURAL GAS
EFFECTIVE: 2.1.71 O. C. C. EFFECTIVE: 2-1-71 Company or Operator Particular Factories Corporation Lease Tallo The Fields Well No. 1 Unit Letter L S 1 T18 R 27 Pool Pool Pool Pool County Bddy Kind of Lease (State, Fed. or Patented) If well produces oil or condensate, give location of tanks: Unit F S 1 T 128 R 278 Authorized Transporter of Oil or Condensate Eff. 4/1/70 name change from 3411 Knoxville Avenue Service to Amoco Pipeline Co. Address (Give address to which approved copy of this form is to be sent) Authorized Transporter of Gas Expire Abs Gassline Plant Address 1 Pen Davison Poter Comp., 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 ( ) ( ) Other Give explanation below) Change in Ownership Remarks: 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 Original Signed by J. W. BROWN Ву SEP \_5 1960 Title Area Superintendent Approved 19 Company Pan American Petrolem Corporation OIL CONSERVATION COMMISSION Address Box 68 Hebbs, New Mexico 500 1 1 140 4 1 80371B

OIL CONSERVATION COMMISSION
ARTESIA DISTRICTORE
No. Cop. 1 (ved. 5) () AME. CANSPORTE ---FILE MEN OF MANS

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# NEW MEXICO OIL CONSERVATION COMMISSION P. O. DRAWER DD ARTESIA, NEW MEXICO

March, 1	.968
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# SUPPLEMENT TO THE OIL PROPATION SCHEDULE

DATE <b>3/1/6</b> 8	and the second s
PURPOSE: ALLOWABLE ASS	EIGHMENT (BACK ALLOWARDE)
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	o. A-220.
#1-L, 1-18-27, 18 bbls   #2-E, " , 18 bbls   #3-H, " , 18 bbls   #4-F, " , 16 bbls   #5-K, " , 16 bbls   #6-B, " , 18 bbls   #8-C, " , 18 bbls   #8-C, " , 18 bbls   #9-H, " , 16 bbls   #11-A, " , 18 bbls   #12-H, " , 18	total total total total total total total total total total total total total total total total total total total TO AMOCO PRODUCTION CO.
WAG/jw	
Pan Am. Petr. Corp.	OIL CONSERVATION COMMISSION
ample 4-1-70	SUPERVISOR, DISTRICT NO. 2

**EXTRA COPY** 

AREA SUPERINTENDENT

SIGNED

(This space for Federal or State of S

N. M. O. C. C. COPY  UNITED STATES  SUBMIT IN THE CATE (Other instructions on response)  DERARTMENT OF THE INTERIOR verse side)  GEOLOGICAL SURVEY	Form approved.
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Amoco Production Company	9. WELL NO.
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Total 0+104 Supersedes Old C-104 and C-110 Difective 1-1-65

Financial Alberta Company

# REQUEST FOR ALLOWABLE

;	NTA FE.		OR ALLOWABLE	Supersedes Old C-104 and C-110 Effective 1-1-65	
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<u> </u>	coson(s) for filing (Check proper box)	nobb, no	Oluet Ortease extuan	n) Included in Empire Abo	
	ew Well	Change in Transporter of:	Unit eff: 1	0-1-73. Change in lease	
i	ecompletion	Oil Dry Ges		IAIÇO F Federal #1.	
C	hange in Ownership $[X]$	Condens Condens	rate []		
, If	change of ownership give name d address of previous owner	AMOCO Production Com	pany P. O. Box 68,	Hobbs, New Mexico	
57 TS	escription of well and L	rang	Kind	of Lease Lease No.	
	ease Name	Well No. Pool Name, Including Fa	1111011011	Federal or Fee Federal	
_	Empire Abo Unit K	11 Emp110 Inc			
[ L	ocation 7 198	South Line	660 Fee	t From The	
	Unit Letter L 198	Feet From The Line	7 dnd		
	Line of Section 1 Town	ashlp 18S Range	27E , NMPM,	Eddy County	
Ĺ.					
777. D	ESIGNATION OF TEANSFORT	X OF OIL AND NATURAL GA	S A Perens (Give address to white	ch approved copy of this form is to be sent)	
	Name of Authorized Transporter of Cil AMOCO Pipe Line Com	A of confidences	2300 Continental Bk. Bldg., Ft. Worth, Tex. 76102		
-	Name of Authorized Transporter of Cana	nghead Gas [X] or Dry Gas [	Address (Give address to whi	ch approved copy of this form is to be sent)	
i	AMOCO Production Con	ກາງການ	P. O. Box 68, Ho	bbs, New Mexico 88240	
1	lf well produces oil or liquids, give location of tanks.	F 1 18S 27E	yes	9-3-60	
I	f this production is commingled with	a that from any other lease or pool,	give commingling order num	ber:	
IV.	COMPLETION DATA	Oil Well Gas Well	New Well Workover De	eepen Plug Back Same Resty, Diff, Resty.	
Į.	Designate Type of Completio	n = (X)		P.B.T.D.	
1	Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.1.D.	
-	Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oll/Gas Pay	Tubing Depth	
				Depth Casing Shoe	
Ì	Perforations				
ļ		TUBING, CASING, AN	D CEMENTING RECORD		
1	HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT	
	HOLE SIZE				
		ow by y could by H Clest must be	after recovery of total volume o	f load oil and must be equal to or exceed top allo	
₩.	TEST DATA AND REQUEST FOIL WELL	able for this	dench or be for full 24 nours)		
	Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pu	mp, gas sop, coor,	
			Casing Pressure	Choke Size	
	Length of Test	Tubing Pressure			
	Actual Prod. During Test	Oil-Ebla.	Water - Ebla.	Gas - MCF	
	GAS WELL Actual Prod. Test-MCF/D	Length of Test	Bbla. Condensate/MMCF	Gravity of Condensate	
	Actual Prod. 1881-MC17D		Casing Pressure (Shut-in	Choke Size	
	Testing Method (pitot, back pr.)	Tubing Pransure (Shat-14)			
		ACE.	OIL CO	NSERVATION COMMISSION P 28 1973	
VI	. CERTIFICATE OF COMPLIAN	IUL	14	.h 88 lats	
	I hereby certify that the rules and	regulations of the Oil Conservation	APPROVED	a Grand	
	Commission have been complied	with and that the information give ne best of my knowledge and belie	E I SIY	1. Ly week.	
	above is true and complete to the	· · · · · · · · · · · · · · · · ·	TITLE OIL AND G	AS INSPECTOR	
			1116	The second section of the section of the sec	

D.L.S.	Lackelfelser	<u>/</u>
Sr. Acctg.	Clerk	
	(Title)	
9-26-73		
#	(Date)	

This form is to be filed in comp isnce with HULE 1144.

If this is a request for allowable for a newly drilled or deepens well, this form must be accompanied by a tabulation of the deviation of 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 owns well name or number, or transporter, or other such change of condition

Separate Forms C-104 must be filed for each pool in multip

ALL DESCRIPTION OF THE PERSON			Supersedes Old
151 1110 01 101			C-102 and C-103
	NEW MEXICO OIL CONSERV	NATION COMMISSION	Effective 1-1-65
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111			Su. Indicate Type of Lease -Cd
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CI-HATOR 1	ا		
	and the same of th	O. C. C.	
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			17
P. O. Box 129 Arte	sia; New Mexico 88210		10. Field and Fool, or Wildeat
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- CRM REMEDIAL WORK		OMMERCE DRILLING OPNS.	PLUG AND ABANDONMENT
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LIVE OR ALTER CASING	CHARGE PLANS	ASING TEST AND CEMENT 240	
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14 Augustine Proposed of Completed	Operations (Clearly state all pertinent details	Piping braden head to so, and give pertinent dates, including	surface. cestimated date of starting any proposed
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COMMITIONS OF APPROVAL, IF ANYI

NEW MEXICO OIL CONSERVATION
<ul> <li>REQUEST FOR ALLOWA</li> </ul>
· AND
DRIZATION TO TRANSPORT OIL

	CISTRIBUTION 6	NEW MEXICO OIL C	ONSERVATION COMMISSION	Forma C -104
Ī	SANTA FE	· REQUEST	FOR ALLOWABLE	Supersedes Old C-104 and C-110
Ī	FILE / V	•	AND	Effective 1-1-65
Ī	U.S.G.S.	AUTHORIZATION TO TRA	NSPORT OIL AND NATURAL G	AS
Ī	LAND OFFICE			
	TRANSPORTER OIL / GAS 2		•	RECEIVED
ŀ	OPERATOR /		•	
	PROBATION OFFICE			MAR 1 4 1979
*-	Operator ARCO Oil and Ga	s Company -		WILLIAM TO THE TOTAL THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE
- 1		antic Richfield Company		252
ŀ	Address			ARTESIA, OFFICE
1	P. O. Box 1710.	Hobbs, New Mexico 88240	0	ARIESIA, DITIBL
-	Reason(s) for filing (Check proper box)		Other (Please explain)	
-	New Well	Change in Transporter of:	Change in Operat	or Name
	Recompletion	Oil Dry Ga	f == 1 1 ==	
	Change in Ownership	Casinghead Gas Conder	nsate	·
ı.				
	If change of ownership give name and address of previous owner			
1.	DESCRIPTION OF WELL AND I	LEASE		Kind of Lease
	Lease Name	Well No. Pool Na.	me, Including Formation	State, Federal or Fee Fordan a
	Empire Abo Unit K	/7 Empi	re Abo	Sidie, Federal of Fee Telleria
	Location Unit Letter 4 198	D Feet From The South Lin	ne and <u>660</u> Feet From	The West
-			27E , NMPM.	Eddy County
	Line of Section . 7.15.	7.50		
1.	DESIGNATION OF TRANSPORT		Asdress (Give address to which appro 2300 Continental Nation	ved copy of this form is to be sent)
2	Amoco Pipeline Company	7	Ft. Worth, Texas 76102	2
	Name of Authorized Transporter of Cas Amoco Production Compa	singh <del>a</del> d Gas 👿 or Dry Gas 🗔 any .	Address (Give address to which appropriate P.O. Drawer A, Levellar 4001 Penbrook, Odessa,	nd, Texa: 79336
	Phillips Petroleum Con	Unit Sec. Twp. Ege.	Is gas actually connected? Wh	en .
	If well produces oil or liquids, give location of tanks.	F 1 18 27		MO + P.P 9-3-60
	If this production is commingled with	th that from any other lease or pool,	give commingling order number:	
V.	COMPLETION DATA .	Oil Well Gas Well	New Well Workover Deepen	Plug Back   Same Res'v. Diff. Res'v.
	Designate Type of Completic	$\operatorname{on} - (X)$		; ; ;
	Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
	Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
	No Change Pool	Name of Producing Formation	Total Depth  Top Oll/Gas Pay	P.B.T.D. Tubing Depth
. 4	No Change			Tubing Depth
. 4	No Change			
	No Change	Name of Producing Formation	Top Oll/Gas Pay	Tubing Depth
	No Change Paol Perforations	Name of Producing Formation TUBING, CASING, AN		Tubing Depth
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.4	No Change Paol Perforations	Name of Producing Formation TUBING, CASING, AN	Top O11/Gas Pay	Tubing Depth  Depth Casing Shoe
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.4	No Change Paol Perforations	Name of Producing Formation TUBING, CASING, AN	Top O11/Gas Pay	Tubing Depth  Depth Casing Shoe
. · ·	No Change Pool  Perforations  HOLE SIZE	TUBING, CASING, AN	Top OII/Gas Pay	Tubing Depth  Depth Casing Shoe  SACKS CEMENT
 	No Change Paol Perforations	TUBING, CASING, AN CASING & TUBING SIZE  OR ALLOWABLE (Test must be	Top Oll/Gas Pay  D CEMENTING RECORD  DEPTH SET  after recovery of total volume of load oil lepth or be for full 24 hours;	Tubing Depth  Depth Casing Shoe  SACKS CEMENT  and must be equal to or exceed top allow-
٧.	No Change Pool  Perforations  HOLE SIZE  TEST DATA AND REQUEST F	TUBING, CASING, AN CASING & TUBING SIZE  OR ALLOWABLE (Test must be	Top Oll/Gas Pay  D CEMENTING RECORD  DEPTH SET  after recovery of total volume of load oil	Tubing Depth  Depth Casing Shoe  SACKS CEMENT  and must be equal to or exceed top allow-
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<b>V.</b>	No Change Pool  Perforations  HOLE SIZE  TEST DATA AND REQUEST FOIL WELL Date First New Oil Run To Tanks No Change Length of Test	TUBING, CASING, AN CASING & TUBING SIZE  OR ALLOWABLE (Test must be able for this d  Date of Test  Tubing Pressure	Top Oll/Gas Pay  D CEMENTING RECORD  DEPTH SET  after recovery of total volume of load oil lepth or be for full 24 hours;  Producing Method (Flow, pump, gas in casing Pressure)	Tubing Depth  Depth Casing Shoe  SACKS CEMENT  and must be equal to or exceed top allow- ift, etc.)  Choke Size
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 V.	No Change Pool  Perforations  HOLE SIZE  HOLE SIZE  TEST DATA AND REQUEST FOIL WELL  Date First New Oil Run To Tanks  No Change Length of Test  Actual Prod. During Test	TUBING, CASING, AN CASING & TUBING SIZE  OR ALLOWABLE (Test must be able for this d  Date of Test  Tubing Pressure  Oil-Bbis.	Top Oil/Gas Pay  D CEMENTING RECORD  DEPTH SET  after recovery of total volume of load oil epth or be for full 24 hours;  Producing Method (Flow, pump, gas in  Casing Pressure  Water-Bbis.	Tubing Depth  Depth Casing Shoe  SACKS CEMENT  and must be equal to or exceed top allow- ift, etc.)  Chake Size  Gas-MCF
<i>V</i> .	No Change Page Page Page Page Page Page Page Page	TUBING, CASING, AN CASING & TUBING SIZE  OR ALLOWABLE (Test must be able for this d  Date of Test  Tubing Pressure	Top Oll/Gas Pay  D CEMENTING RECORD  DEPTH SET  after recovery of total volume of load oil lepth or be for full 24 hours;  Producing Method (Flow, pump, gas in casing Pressure)	Tubing Depth  Depth Casing Shoe  SACKS CEMENT  and must be equal to or exceed top allow- ift, etc.)  Choke Size
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 	No Change Pool  Perforations  HOLE SIZE  HOLE SIZE  TEST DATA AND REQUEST FOIL WELL  Date First New Oil Run To Tanks  No Change Length of Test  Actual Prod. During Test	TUBING, CASING, AN CASING & TUBING SIZE  OR ALLOWABLE (Test must be able for this d  Date of Test  Tubing Pressure  Oil-Bbis.	Top Oil/Gas Pay  D CEMENTING RECORD  DEPTH SET  after recovery of total volume of load oil epth or be for full 24 hours;  Producing Method (Flow, pump, gas in  Casing Pressure  Water-Bbis.  Bbis. Condensate/MMCF	Tubing Depth  Depth Casing Shoe  SACKS CEMENT  and must be equal to or exceed top allow- ift, etc.)  Choke Size  Gas-MCF  Gravity of Condensate

I hereby certify that the rules and regulations of the Oil Conservation

Commission have been complied with and that the information given shows is true and complete to the best of my knowledge and belief.

District Prod & Drlg Supt.

(Title)

(Date)

TITLE SUPERVISOR, DISTRICT I

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

CIX

District I PO Box 1998, Hobbs, NM 88241-1998 District II PO Box 1998, Hobbs, NM 88241-1998

State of New Mexico

Eaergy, Maerah & Natural Reserves Department

Form C-104
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
5 Copies

OIL CONSERVATION DIVISION

District II PO Drawer DO, District III 1998 Rio Brazza				0	IL CONS Santa F	PO	Rox 20	88		NC	Suba			te District Office 5 Copies NDED REPORT
District IV PO Box 2008, S	ania Fe,	NM I	7564-2688	COD A	LIOWAR	l F	AND.	AIT	rhori	ZATI	ON TO TI	RANSP	ORT	
<u>I.</u>		RE	QUEST	FUK A	ne and Address	LL	AND .	<u> </u>				' OGRID	Numbe	•
ARCO Pe	rmiat	, /	`	<b>, ,</b>						l	000990 <sup>3</sup> Resses for Filing Code			
A Unit	of A	t1ar	ntic Ric	hfield	Co.					ſ				
	P.O. Box 1710 Hobbs, NM 88240									1	JUN 1 1994 CH			
	NM .		40	* Pool Name								' Peel Code 22040		
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	reperty (												' W	d Number
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<sup>12</sup> Lee Code	" Pro	duda	Method Cod	de Ge	Connection De	40	4 C-129	Permi	, Number	7	C-129 Effective	Date	" C-1	29 Expiration Date
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VI. Wel	1 Tes	t D	ata	<del> </del>										
	New Of			efivery Date	*	Test D	ste		" Test L	ength	" Tbg.	Pressure		<sup>30</sup> Cag. Pressure
	<b>.</b>		ļ	1.04		Wate			● Ge			NOF	+-	<sup>4</sup> 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.

Printed name: Kellie D. Mur	rish Munsh	Tide:	
Title: Records CLerk		Approval Date:	
Detc: 6-1-94	Phone: 505-391-1649	JUN 0 1994	
7 16 15 la la cada cada cada cada	ator fill in the OGRID number and name of the p	revious operatur	
ti ram m a carmie or ober			

		NM OIL CONS (COMMISSION CASE)  Drawer DD FORM APPROVED
101111111111111111111111111111111111111	ED STATES	Artesia, Madgey March 31, 1993
(5422-155-)	FOF THE INTERIOR AND MANAGEMENT	5. Lease Designation and Serial No.
SUNDRY NOTICES AND Do not use this form for proposals to drill of	D REPORTS ON WELLS  or to deepen or reentry to a different reservoi  PERMIT - " for such proposals	LC-062412 NNI 055737
	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well    X Oil   Gas   Other	$\bigvee$	8. Well Name and No.  EMPIRE ABO UNIT"K" # 17  9. API Well No.
ARCO Permian  3. Address and Telephone No.		30-015-00703
P.O.BOX 1610, MIDLAND, TX 7970	915 688-5672	10. Field and Pool, or exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey De 1980 FSL & 660 FWL (UNIT LETT	scription)	EMPIRE ABO  11. County or Parish, State
1-18S-27E		EDDY NM
	) TO INDICATE NATURE OF NOTICE, REF	PORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF A	
X Notice of Intent	Abandonment	Change of Plans
_	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Houtine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	X Other ADD HORIZONTAL	(Note: Report results of multiple completion on Well
13. Describe Proposed or Completed Operations (Clearly state a give subsurface locations and measured and true ver	ll pertinent details, and give pertinent dates, including estimated da tical depths for all markers and zones pertinent to this work.)*	Completion or Recompletion Report and Log form.) te of starting any proposed work. If well is directionally drilled.
PROPOSE TO ADD HORIZONTAL DRAIN 1.POH W/PROD CA. 2.SET RETRIEVABLE WHIPSTOCK.	OTUS CURVE. HAY - 9 1995	N.M.

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.

PETROLEUM ENGINEER

Title AGENT

Title \_\_\_\_

14. I hereby certify that the foregoing is true and correct
Signed Ken W Somell

(This space for Federal or State office use)
Approved by (ORIG. SQD.) JOE G. LARA
Conditions of approval, if any:

#### HORIZONTAL SIDETRACK PROCEDURE

**DATE:** May 1, 1995

COUNTY: Eddy, NM WELL: Empire Abo #K-17 DRILLED: 1959 FIELD: Empire Abo

BY: P.N. Drennon TD: 6,137' **PBD:** 6,101' DATUM: 12' KB

SX CMT **TOC WEIGHT GRADE** SET @ CASING: J-55 J-55 surf-circ SURFACE: 24# 1.000 surf-circ PROD:

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: Azimuth:

Same as above E (90º)

Target Depth:

6,060 Total 1.250'

Planned Displacement: Surface Lacation:

1,980' FSL, 660' FWL, Sec. 1, T-18-S, R-27-E, Eddy Co., N.M.

#### **PROCEDURE**

- MIRU PU, pump, swivel, pits. Install H<sub>2</sub>S safety equipment. Pull rods and pump, warehouse same. ND 1. tree, NU BOPE. Pull tubing, LD and warehouse.
- PU 4 3/4" bit and scraper, 10 3-1/2" DC, 2 7/8" AOH DP, TIH to PBTD 6,101, circulate @ TD if 2. necessary. RU & run gyro multi-shot survey via DP. RD survey equipment, TOOH, LD bit and scraper.
- GIH w/ packer and set in vicinity of 5,800'. 3.
- Test casing and stack to 750 psig. 4.
- PU anchor, whipstock assembly w/ starter mill, BHA, TIH, hydraulically set anchor @ 5,810'. 5.

Note: Oriented assembly, azimuth E (compass 90°) per O/A Engineer (Gary Smallwood).

- Shear off whipstock assembly w/ starter mill. Mill out casing and shear bolt assembly to start 6. window, use Abo produced water for circulation. Use polymer additions for additional lift if necessary.
- TOOH, LD starter mill, PU window mill, 1 jt S-135 AOH DP, BHA, TIH. 7.
- Finish cutting window, drill out into open hole, circulate clean. 8.
- TOOH, LD window mill and inspect for proper wear. PU window mill, watermelon mill, 9. BHA.

Note: Air/foam package to be on location at this point.

TIH, clean and dress window, drill 8-10' formation, circulate clean. 10.

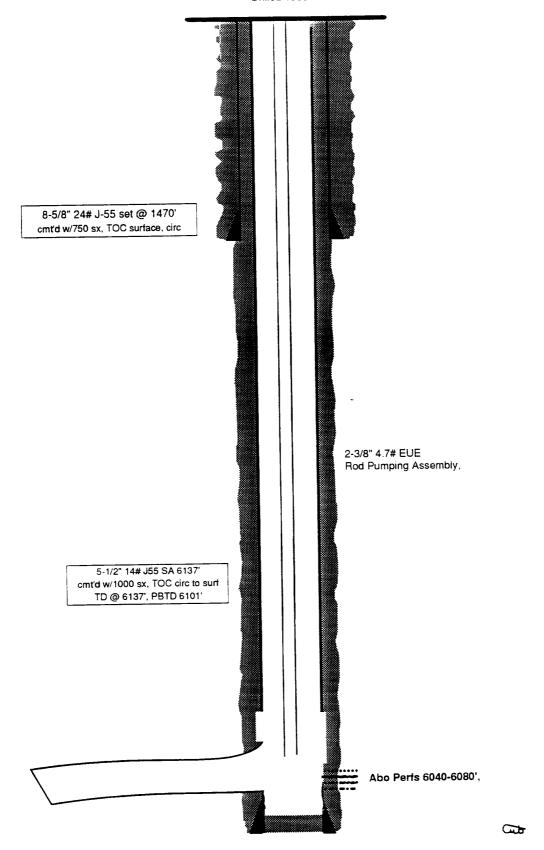
- 11. TOOH, LD window and watermelon mills, check for proper wear. PU 4 ¾" drag bit, bent housing motor, bent sub, non-mag DC, 2 7/8" 8.7# PH-6 tbg DC's (minimum 2 DC's in casing @ TD of build curve), TIH.
- 12. Displace hole w/ stiff foam (expect 700-800 SCF/min w/ 1.75 BPM water w/ 8-10 gal/1000 foamer).
- 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/ prcduced 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 COMMESSION

Form 3160-5 (June 1990)

## UNITED STATES DEPARTMENT OF THE INTERIOR

Drawer DD Artesia, NM Burgersineau No. 1004-0135
Expires: March 31, 1993

Expires: March 31, 1993
Lease Designation and Serial No.
LC-062412

BUREAU OF L	AND MANAGEMENT	3. Lease Designation and Serial No.
SUNDRY NOTICES AND	DEDODTS ON WELLS	LC-062412
		6. If Indian, Al ottee or Tribe Name
Do not use this form for proposals to drill or		
Use "APPLICATION FOR	PERMIT - " for such proposals	
	THE PROPERTY AND ADDRESS OF THE PARTY AND ADDR	7. If Unit or CA, Agreement Designation
SUBMIT	IN TRIPLICATE	89101380 0
1. Type of Well		
X Oil Gas Well Other		8. Well Name and No.
2. Name of Operator	/	EMPIRE ABO UNIT K-17
ARCO Permian	1/	9. API Well No
3. Address and Telephone No.		30-015-00703
P.O. Box 1710 Hobbs, N.M. 88240	505-391-1649	10. Field and Pool, or exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey Des	ecription)	EMPIRE ABO
1980' FSL & 660' FWL, Unit Letter L		11. County or Farish, State
Sec. 1, T18S, R27E		
,		EDDY NM
12. CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF NOTICE, REPORT	T, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
TYPE OF SUBMISSION		
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	Convers on to Injection
	X Other ACIDIZE HORIZONTAL	Dispose Water
	Outer	(Note: Report r sults of multiple completion on W
	ll pertinent details, and give pertinent dates, including estimated date of sta	Completion or Recompletion Report and Log form
<ol> <li>Describe Proposed or Completed Operations (Clearly state at give subsurface locations and measured and true ver</li> </ol>	tical depths for all markers and zones pertinent to this work.)*	- Ing Inc. proposed to the contract of the con
	CIBP ABOVE PERFS @ 5823'. WHIPSTOCK @ 5782'.	
TOP OF WINDOWS @ 5797', BOTTOM OF	WINDOW @ 5803'. hORIZONTAL 5800-7705'	
ACCOUNT OF THE PROPERTY AND THE PROPERTY OF TH	TTION 5800-7705 W/2500 GALS 15% NEFE ACID AND 25	ON CALS
06/21/95; ACIDIZE HURIZUNTAL EXTEN	ENSATE WHILE MOVING C.T. ALONG HORIZONTAL	FLUSH W/20 BPW.
COMPENSATE: DISTENCED NOID COMP		
	ACCEPTED FOR RECORD	
RECENT CEP 12	WEIT	D C
RESE	y fara	6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5
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000 12	1995	វិធី
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_ 0	N. DIV. MARKED AW WILL	
an COI	No DIVO	1-44
	7 <sup>1</sup> 7)	Special Control of Con
DIST	la Co	
		Ş
14. I hereby and if that the formation in taxo and as-most		
14. I hereby certify that the foregoing is true and correct	Title Administrative Assistant	(8/15/95
Signed / Clear W. // HIME	111111111111111111111111111111111111111	Date
(This space for Federal or State office use)		

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, licitious or fraudulent statements or representations as to any matter within its jurisdiction.

\_\_ Title \_

## **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.

Form 3160-5 (June 1990)

## **UNITED STATES** DEPARTMENT OF THE INTERIOR

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

	AND MANAGEMENT	5. Lease Designation and Serial No.		
SUNDRY NOTICES AND  Do not use this form for proposals to drill or  Use "APPLICATION FOR P	LC-962412 NM -055 737 6. If Indian, Allettee or Tribe Name			
SUBMIT I	N TRIPLICATE	7. If Unit or CA. Agreement Designation		
Type of Well Oil Well Other		8. Well Name and No.		
2. Name of Operator		EMPIRE ABC UNIT"K" 17		
ARCO Permian		9. API Well No.		
<ol> <li>Address and Telephone No.</li> <li>P.O.BOX 1610, MIDLAND, TX 79702</li> <li>Location of Well (Footage, Sec., T., R., M., or Survey Desc</li> </ol>	915 688-5672	30-015-00703 10. Field and Pocl, or exploratory Area EMPIRE ABO		
1980 FSL & 660 FWL(UNIT LETTE		11. County or Parish, State		
1000 102 & 000 12(0 22.1.2	<b>-,</b>			
1-18S-27E		EDDY NM		
2. CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF NOTICE, REPOR	T, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTIO	N		
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 EX	(Note: Report results of multiple completion on Well		
. Describe Proposed or Completed Operations (Clearly state all give subsurface locations and measured and true verti	pertinent details, and give pertinent dates, including estimated date of st cal depths for all markers and zones pertinent to this work.)*	Completion or Recompletion Report and Log form.) tarting any proposed work. If well is directionally drille		
W/WHIPSTOCK. RAN GYRO SURVEY F/S 6' WINDOW IN 5 1/2 CSG(5797-5803	RIH W/4 3/4 BIT TO 6099 PBD. SET CI SURF-5798. SET WHIPSTOCK PKR ASSEMB B). DIRECTIONAL DRILLED TO 7705 MD. D 5906. PKR SET AT 5772. RDPU 06-13	LY AT 5812. CUT		
		DEC 1 8 1995		
		OIL COM. DIV.		
	BEC A	DIST. 2		
14. I hereby certify that the foregoing is true and correct Signed Rem W Somul	Title AGENT	Date 11-16-95		
(This space for Federal or State office use)				
(This space for Federal or State office use)  Approved by Conditions of approval, if any:	Title	Date		

====== 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.

					TRUE				
S	MEASURED	DRIFT	DRIFT	COURSE	VERTCAL	VERTCAL	RECTANG	ULAR D	OGLEG
#	DEPTH	<b>ANGLE</b>	DIRECTION	LENGTH	DEPTH		COORDIN		ERITY
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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	
3	5857.0	17.10	64.500	29.0	5845.6	-158.6	225.2 N	163.7 W	
4	5887.0	23.60	76.700	30.0	5873.7	-148.7	228.5 N	153.8 W	
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	
7	5979.0	42.70	97.000	31.0	5951.7	-101.2	225.5 N	106.3 W	
8	6011.0	51.40	95.200	32.0	5973.5	-78.0	223.0 N	83.0 W	
9	6043.0	59.60	96.100	32.0	5991.6	-51.9	220.4 N	56.8 W	
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	
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
00	0005 0	00.10	100 100						
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	07 00	101 000	20.0	0000	400 =			
26	6544.0 6574.0	87.00 86.50	101.000	32.0	6068.3	420.5	110.4 N	418.1 E	2.27
27	6604.0		100.800	30.0	6070.0	449.8	104.8 N	447.5 E	1.79
28	6636.0	86.50	100.900	30.0	6071.8	479.0	99.1 N	477.0 E	0.33
29		88.00	99.300	32.0	6073.4	510.4	93.5 N	508.4 E	6.85
43	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	1.16
32	6819.0	88.10	100.200	61.0	6080.2	690.1	63.6 N	688.8 E	1.19
33	6848.0	87.90	100.300	29.0	6081.2	718.5	58.5 N		0.77
34	6909.0	88.80	98.400	61.0	6083.0	778.4	38.5 N 48.6 N	717.3 E	
35	6939.0	88.50	98.500	30.0	6083.7	808.0		777.5 E	3.45
00	0000.0	50.50	50.500	30.0	0000.7	000.0	44.2 N	807.2 E	1.05

					TRUE				
S	MEASURED	DRIFT	DRIFT	COURSE	VERTCAL	VERTCAL	RECTAN	GIII AR	DOGLEG
#	DEPTH	ANGLE	DIRECTION	LENGTH	DEPTH	SECTION	COORDI		EVERITY
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36	7001.0	89.60	98.300	62.0	6084.7	869.1	35.1 N	868.5 1	7 1 00
37	7062.0	86.60	95.700	61.0	6086.8	929.4	27.7 N		
38	7152.0	89.80	96.500	90.0	6089.6	1018.6		929.0 I	
39	7214.0	91.30	96.300	62.0	6089.0		18.1 N	1018.4	_
40		92.40	96.100	62.0		1080.0	11.2 N	1080.0 I	
	1210.0	52.40	30.100	02.0	6087.0	1141.5	4.5 N	1141.6 I	E 1.80
41	7336.0	92.60	96.500	60.0	6084.4	1000 0	0 1 0	1001 0 .	
42	7362.0	92.90	96.400	26.0		1200.9	2.1 S	1201.2 H	
43	7427.0	92.20	97.100		6083.1	1226.6	5.0 S	1227.0 H	
44	7458.0			65.0	6080.2	1290.9	12.6 S	1291.5 H	
45		90.00	97.600	31.0	6079.6	1321.6	16.6 S	1322.3 H	E 7.28
45	7520.0	88.30	97.700	62.0	6080.6	1382.8	24.8 S	1383.7 F	E 2.75
4.0	7500 0	0= 10	00.100						
46	7583.0	87.10	98.100	63.0	6083.1	1444.9	33.5 S	1446.0 E	E 2.01
47	7641.0	86.40	98.500	<b>58.</b> 0	6086.4	1502.0	41.8 S	1503.3 E	
48	7672.0	85.80	98.900	31.0	6088.5	1532.5	46.5 S	1533.9 E	
		19 is P	rojected to	TD!				2000.0 1	02
49	7705.0	85.20	98.900	33.0	6091.1	1564.9	51.6 S	1566.4 E	1.82
							Q + . U D	1000.4 L	1.02

<sup>---</sup> 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.

Well nu	mber : EMF	PIRE ABO	"K" NO.			Date : 24-	MAV OF	
Massuond	llankin 1	11	<b>.</b>					
Danath	Vertical	. Vert.	Inc	Azimuth	Coord	inates	D-len	
Depth	· · ·	00001	Dea	വജന് -	Latitude	Departure	/1/00 6+	
0.0	0.00	0.0	a aa	0.00	2.00			
100.0	100 00	-0 1	0.00	336.94		0.00	0.00	
200.0	100.00 200.00	-0 3	0.24	770.11	VI / 1	-0.00	0. 00	
300.0	300.00	-0.5		338.11	0.61	-0.26		
400.0	400 00	-1.1	0.31	329.92 315.24	1.04 1.53	-0.47		
							=	
500.0	499.99	-1.7	0.48	316.06	2.08 2.71	1 40		
600.0	599.99	-2.5	0.60	300 21	2.00	-1.40	0.07	
700.0	699.98	-2.5 -3.6		200.21	3.27	-2.10	0.14	
800.0	799.97	-6 1	1 00	201.57			0.27	
900.0	899.94	-7.7	1 47	281.40	3.68	-4.63	0.27	
		_		287.75		-6.70		
1000.0	999.90	-10.0	1.75	293.11	5.23	-9.33	0.32	
			1.76	300.33	5.61 8.21	-12.05	0.02	
1200.0	1199.81	-15.8	1.82	301.42	8.21	-14 74	0.22	
1300.0	1299.76	-18.7	1.84	ላወፍ ፈድ	0 07	177 40		
1400.0	1399.71	-21.6	1.85	307.40	11.88	-19 99	0.15	
						-10.33	<b>۵۵.</b> هاه. هاه. هاه. هاه. هاه. هاه. هاه. ها	
1500.0	1499.65	-24.4	1.86	309,17	13.89	-22.53		
1500.0	1599.60	-27.2	1.84	309.49	15.93	-25 03	0.02	
1700.0	1699.55	-30.0		306.69	17.92	-25.03 -27.56	0.09	
1800.0	1799.50	-32.9	1.90	305.11	19.84	-30.21	0.03	
1900.0	1899.44	-35.9	1.84	298.32	21.55	-32.98	0.07 0.23	
2000 0	1000 70	70.0						
2000.0	1999.39	-39.0	1.80	295.41	22.99	-35.82	0.10	
	2099.34		1.76	292.14	24.24 25.29	-38.66		
	2199.30		1.63	289.34	25.29	-41.42	0.15	
	2299.26	-47.7		285.57	26.14	-44.12		
2400.0	2399.22	-50.5	1.65	289.24	26.99	-46.83		
2500.0	2499.18	-53.4	1.77	292.86	28.06	-49.61	0.16	
	2599.13		1 91	205 17	20 77	-52.46		
	2699.07		1.92	297.43	29.33 30.78	-55.38	0.08	
	2799.02		1.98	299 75	32.38	-22·28	0.13 0.07	
	2898.95		2.09	300.78	34.14	-61.46	0.13	
3000.0	2998.88	-69.5	2.18	304,51	36.15 38.44	-64.60	0.17	
					38.44	-67.76	0.15	
3200.0	3198.72	-76.5		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	AD 04	-01 53	A 25	
3600.0	3598.27	-92.8			49.84	-81.52	0.25	
3700.0	3698.12	-97.4		311.18	53.27	-05.48	0.17	
3800.0				310.20	56.84	-89.64	0.11	
שיששפנ	3797.95	-102.2	3.37	313.04	60.64	-93.91	0.24	

page 1

Incun Survey ARCO OIL & GAS COMPANY

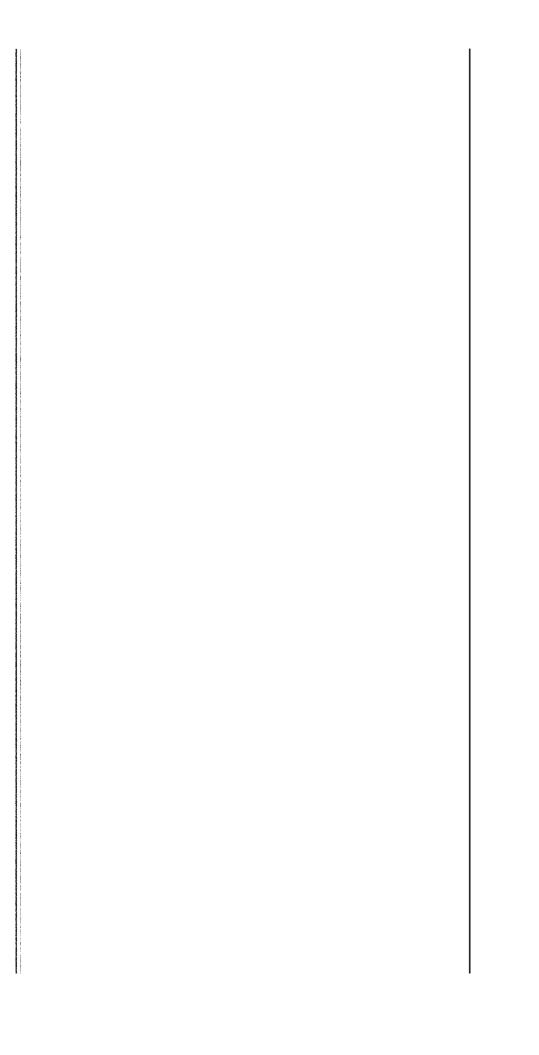
Date : 24-MAY-95

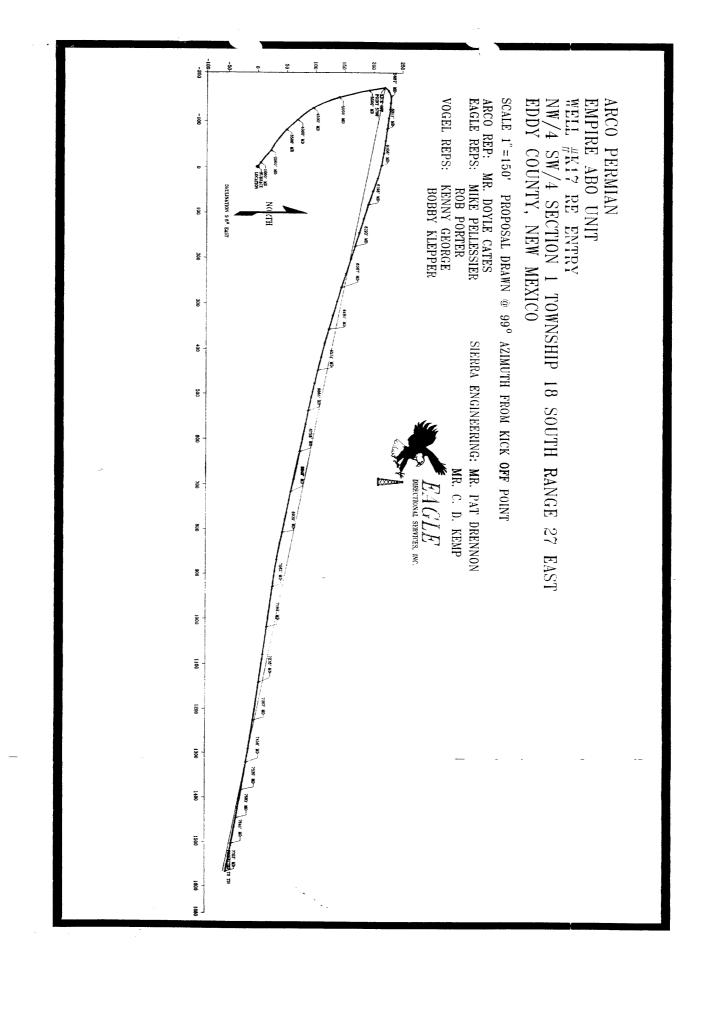
page 2

М	easured	Vertical	Vert.	Inc	Azimuth	Coordi		D-leg
	Dapth	Depth	Section	Deg	Deg	Latitude	Departure	/100ft
						North	West	<u></u>
•	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	5.04	341.67	150.84	-154.73	0.32
and the second second second	5200.0	5192.48	-181.1	6.11	343.75	160.94	-157.87	0.23
	5300.0	5291.91	-185.6	5.21	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	5.98	351.26	191.84	-164.92	0.24
	5600.0	<b>5590.</b> 29	-196.3	5.64	347.36	201.78	-186.79	0.52
	5700.0	5689.84	-199.8	5.15	346.67	210.95	-158.90	0.49
	5798.0	<b>578</b> 7.48	-202.8	4.73	3 <b>50</b> .13	219.21	-170.61	0.53

At Bottom Hole Location: Measured Depth Horiz. Displ. Closure Dir. = 5798.0 = 277.775 = 322.107

Wall number : EMPIRE ABO "K" NO.





Form 3160-4 (July 1992)

### UNITED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN DUPLICATE\* (See other inFORM API'ROVED OMB NO. 1004-0137 Expires: February 28, 1995

	DEF	BURE		E LAND M	ANAGEN	MENT			្ន	- rever	se side)				AND SERIAL NO.	
WELL COM	PLET	ION	OR I	RECON	<b>IPLE</b>	TION	RE	POR	TA	ND, L	OG*	6. IF IN	IDIAN, A	LLOTTE	E OR TRIBE NAME	
1a. TYPE OF WELL:			L X	GAS WELL			oth N	14. 3		. <u>.</u> . an		7. UNI	r agree	MENT N	AME	
b. TYPE OF COMPI	ETION:	WEI	<b></b>				د د د				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
NEW WELL	WORK OVER	DEE EN	iP. []	PLUG BACK	DIFF RESV	/R. 🗌 (	Other H	ORIZ	ONTA	L EXT	100	. !			NAME, WELL N	
2. NAME OF OPERATOR												EMP I	RE A	BO U	<u>NIT"K"</u>	17
ARCO PERMI											/	. I	WELLN		20	
3. ADDRESS AND TE			n T	V 70702	,			915 (	699_	5672			-015			
P.O.BOX 16 4. LOCATION OF WELL	(Report le	cation ch	early an	d in accordan	ce with any	State requ			000-	3072		7	PIRE		R WILDCAT	
At surface									-			11. SE	C., T., R.		BLOCK AND SURV	/EY
1980 FSL & At top prod. interval	reported be	:low	OKII	LETTE	( L)							1	area 185-	27E		
At total depth 1928 FSL &	2216	FFI			14. PERM	IT NO.		D	DATE ISS	UED			UNTY OR		13. STATE	
1920 131 0	2210	1						- 1				EDD	rish 1		NM	
15. DATE SPUDDED	16 DATE	T.D. REA	CHED	17. DATE	COMPL.(Red	dv to prod	.)	18.	ELEVA	TIONS (DF	RKB, RT,	1		19. EI	LEV. CASINGHEA	<u> </u>
05-22-95	1	-08-9			13-95	·, · <b>,</b> ·	,				,,					
20. TOTAL DEPTH, MD & 7705 MD 60		21. PLUG	, BACK	T.D., MD & TV		IF MULTIP HOW MANY		IPL.,	<b>~</b> に	23. INTE	RVALS LED BY	X RO	TARY TO	OLS	CABLE TOOLS	1
24. PRODUCING INTERV	AL(S), OF T	HIS COMP	LETION	- тор, вотто	M, NAME (M	D AND TVI	的	156	7 123	U W G	5世			25.	WAS DIRECTION	
5797-7705	ABO						u u	and the second	<b>.</b>	6 48 <b>ስ</b> !	E.			\	ES	
26. TYPE ELECTRIC ANI	OTHER LC	XGS RUN						Uti	(- <b>1</b>	<del>g Nasi</del>	2000			27. WA	S WELL CORED	
28.				CASI	NG RECO			rangs sel	in (e4)	W.	111111111111111111111111111111111111111	ø				
CASING SIZE/GRADE		IGHT, LB./	FT.	DEPTH S	ET (MD)	но 12 1	LE SIZE	1	700	TOP OF C	EMENT, CI	MENTING	RECOR	D	AMOUNT PU	LLED
8 5/8	24			1470 6137		7 7/			CIF						o o	
5 1/2	14			013/		111	<u> </u>		CIF						<u> </u>	
	<del>                                     </del>					<del> </del>										
29.			LINER	RECORD		1			<u> </u>	30.		TUBI	NG REC	ORD	L	
SIZE	TOP (M	(D)		rom (MD)	SACKS C	EMENT•	sc	CREEN (M	AD)	SIZ			I SET (M	D)	PACKER SET	(MD)
										2 3/	8 5	906			5772	
		إربا		0.00000000			<u> </u>									
31. PERFORATION RECO 5797-7705	RD (Interva	l, size and	t numbe	JU TUA	<b>,</b>		32.				FRACT				E, ETC.	
3/3/-//03	OII			SI	M			<u>ертн іхт</u> 97–7		(MD)	$\overline{}$	/1700	_		MISKIAL USED	
			掛	C 14	. Š. +		5,	<i>J, ,</i>	700		<del>  \                                   </del>	/ 1 / 00	- UITL			
		!									<del>                                     </del>					
33.*					. P	RODUCT	ION									
DATE FIRST PRODUCTION 06-13-95	N	PRODU	CTION 1	METHOD (Flow	ving, gas lif	t, pumping	- size o	and type	of punq	p)				STATUS ( t-in)	(Producing or	
DATE OF TEST	HOURS T	ESTED	C	HOKE SIZE		N. FOR PERIOD	OIL -	BBL.		GAS - MC	CF.	WATE	R - BBL.		GAS - OIL RATIO	
FLOW. TUBING PRESS.	CASING	PRESSURE		ALCULATED HOUR RATE	OIL-B	BL.		GAS - M	ACF.		WATER -	BBL.		OIL GR	AVITY - API (COR	R.)
34. DISPOSITION OF GAS	(Sold, used	l for fuel,	vented,	etc.)				l				TEST V	VITNESS	ED BY		***********
35. LIST OF ATTACHME	NTS											1				
DIRECTIONAL																
36. I hereby certify that the		٨						able record	is							
SIGNED Ken	W2	Loss	ul	(	т	TITLE AG	ENT						DA.	re <u>11</u> -	-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 jurisdicton.

N.M. OH CATIS, LANGUAGE

1301 W. Grand (1972)

Form 3160-5 (June 1990)

DEPARTMENT OF THE INTERIOR 10512, NW 0821 BUREAU OF LAND MANAGEMENT

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

5. Lease Designation and Serial No. NM0557371

SUNDRY NOTICES AND REPORTS ON WELLS	SUNDRY	NOTICES	AND	REPORTS	ON	WELLS
-------------------------------------	--------	---------	-----	---------	----	-------

Do not use this form for proposals to drill or t	6. If Indian, Allottee or Tibe Name					
Use "APPLICATION FOR PE	FRMIT - * for such proposals					
SUBMIT IN	TRIPLICATE	7. If Unit or CA, Agreement Designation 8910138010				
1. Type of Well  X Oil Gas Well Other  2. Name of Operator  ARCO Permian		8. Well Name and No. Empire Abo Unit "K" 17				
3. Address and Telephone No.	•					
P.O. Box 1089, Eunice, NM 88231	505-394-1649	30-015-00703  10. Field and Pool, or exploratory Area				
4. Location of Well (Footage, Sec., T., R., M., or Survey Descriptio	Empire Abo					
Unit Letter L, 1980' FSL & 660' FWL						
Section 1, T18S, R27E		11. County or Parish, State				
· · · · · · · · · · · · · · · · · · ·		Eddy NM				
12. CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF NOTICE, REPO	ORT, OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION	N				
Notice of Intent  Subsequent Report  Final Abandonment Notice	Abandonment  X Recompletion  Plugging Back  Casing Repair  Altering Casing  Other	Change of Plans  New Construction  Non-Rowline Fracturing  Water Shut-Off  Conversion to Injection  Dispose Vlater (Note: Report results of multiple completion on W Completion or Recompletion Report and Log for				
3. Describe Proposed or Completed Operations (Clearly state all pegive subsurfacelocations and measured and true vertical d  TD: 6137' PBD: 6101' PERFS: 5800-  MIRUPU. POH w/rods & pmp. NDWH. NUBL RIH w/4-3/4" bit & scraper to top of w	7705' OP. Release TAC @ 5705'. POH w/tbg & 1					

RUWL. GIH w/CIBP & set @ 5770'. 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  $\pm$ - 5736'.

NDBOP. NUWH. Swab for test. GIH w/GA, pmp & rods. Hang well on. RDPU. RTP.

•		
4. I hereby certify that the foregoing is true and correct Signed	Title Sr. Administrative Assistant	Date 01/08/02
(This space for Federal or State office use)		
Approved byConditions of approval, if any:	Title	Date ————

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.

10410 TEMSON INB 60:6 NM 6-187 7017 CENEDAY 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

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

Form C-104A

March 19, 2001

### **Change of Operator**

Previous Operator Information:	New Operator Information:				
	Effective Date:	12/31/2001			
OGRID: <u>000900</u>		000778			
Name: ARCO Permian	New Name: _	BP America Production Company			
Address: <b>P.O. Box 3092</b>		P.O. Box 3092			
Address:	Address: _	Houston, TX 77253			
City, State, Zip: Houston, Texas 77253	City, State, Zip: _	Houston, TX 77253			
I hereby certify that the rules of the Oil Conservation Division form and the attached list of wells is true and complete to the New Operator Signature:  Printed name: Mary Corley  Title: Sr. Regulatory Specialist  Date: 12/10/2001 Phone: 281-366-449	best of my knowledge				
Previous operator complete below:	1	NMOCD Approval			
Previous	_				
Operator: ARCO Permian	Signature:	m W. Gem			
Previous	Printed	which Sigewiew			
OGRID: <u>000990</u>	Name:	which Sylewise			
Signature: May Osley Printed Name: Mary Corley	District:	FEB 0 7 2002			

N.M. Cil Con Thy-Oss faat Vi. Grand FORM APPROVED **UNITED STATES** Form 3160-5 Budget Bureau No. 1004-0135 DEPARTMENT OF THE INTERIOR (June 1990) BUREAU OF LAND MANAGEMENT Expires: March 31, 1993 5. Lease Designation and Serial No. NM0557371 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allc ttee or Tribe Name 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 8910138010 1. Type of Well 2520 X Oil Well 8. Well Name and No. Empire Abo Unit "K" 17 2. Name of Operator BP America Production Company 9. API Well No. 3. Address and Telephone No. <u>30-015-00703</u> P.O. Box 1089, Eunice, NM 88231 10. Field and Pool, or exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Empire Abo Unit Letter L. 1980' FSL & 660' FWL Section 1, T18S, R27E 11. County or Parish, State Eddy CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Abandonment Change of Plans Recompletion New Construction Subsequent Report Plugging Back Non-Rou ine Fracturing Casing Repair Water Shut-Off Final Abandonment Notice Altering Casing Conversion to Injection 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 subsurfacelocations and measured and true vertical depths for all markers and zone spertinent to this work.)\* TD: 6137' CIBP: 5770' PERFS: 5472-5736' Unset pmp & TOH w/rods & pmp. NDWH. NUBOP. Unsetat TAC & POH w/tbg. 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'. Drop SV. RU & pmp 20 bbls 7.5% HCL to pickle tbg. Swab back acid. Fish SV. Pmp 5,15006.04.02: gals 15% HCL w/350 ball sealers. TOH w/pkr. SION. TIH w/3-3/4" bailer & recover ball seals. TOH. TIH w/production tbg. Set @ 57/14" SN ECORD ACCEPTED FOR RECORD 06.05.02:

06.07.02: Load & test to 500# psi. Held OK. In 24 hrs pmp 0 BO, 1 BW, 2 MCF JUN 2 1 2002 LES BABYAK PETROLE UM ENGINEER 14. I hereby certify that the foregoing is frue and correct Title Sr. Administrative Assistant Date 06.18.02 (This space for Federal or State office use) Approved by, Title Date

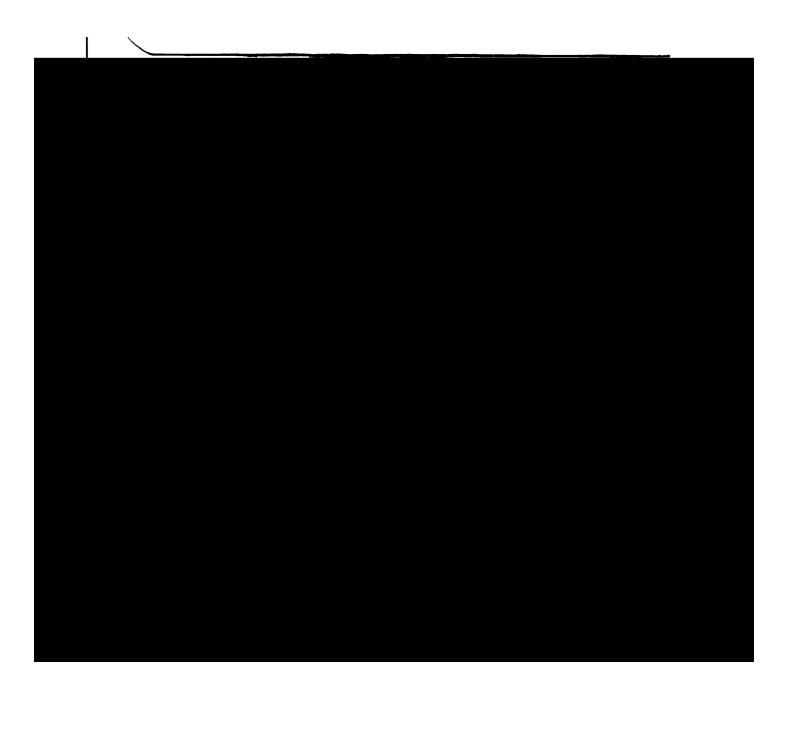
@ 5720'. NDBOP. Set TAC NUWH.

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.

466850-W 2811047-G 2811057-0 2812373-G

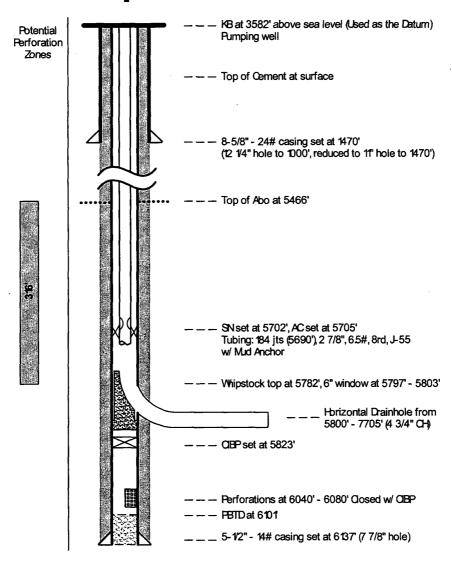
DD-105(H) Appr 1-18-95



	UNITED STATES EPARTMENT OF THE II UREAU OF LAND MANA	)-ARTI	ESIA	FORM OMB NO Expires: No 5. Lease Serial No.	D. 1004-	0135	1		
BUNDRY  Do not use the abandoned we	NOTICES AND REPOR is form for proposals to II. Use form 3160-3 (API	RTS ON WE drill or to re- D) for such p	LLS enter an roposals	<b>s.</b>		NMNM0557371  6. If Indian, Allottee o	r Tribe I	Vame	
SUBMIT IN TRI	PLICATE - Other instruc	tions on rev	erse side			7. If Unit or CA/Agree NMNM70945X	ment, N	ame and	/or No.
Type of Well     ☐ Gas Well ☐ Oth	her					<ol><li>Well Name and No. EMPIRE ABO K 1</li></ol>	7		
2. Name of Operator BP AMERICA PRODUCTION	Contact:	KELLIË D. M E-Mail: murrikd				9. API Well No. 30-015-00703-00-S1			
3a. Address  HOUSTON, TX 77253	3a. Address  3b. Phone No. (include area code) Ph: 505.394.1649 Fx: 505.394.1624						Explora	iory	
4. Location of Well (Footage, Sec., 7		)		RECEI	AED	11. County or Parish,	and State	e	
Sec 1 T18S R27E NWSW 19	80FSL 660FWL			NÓV 1 9	2004	EDDY COUNTY	, NM		
			8						
12. CHECK APP	12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA								
TYPE OF SUBMISSION			T	YPE OF A	CTION				
Notice of Intent	☐ Acidize	Deep Deep	en		Production	on (Start/Resume)	u W	ater Sh	ut-Off
	Alter Casing	□ Frac	cture Treat		□ Reclamation		☐ Well Integrity		
☐ Subsequent Report	☐ Casing Repair	□ New	Construction Recomp			ete		ther	
☐ Final Abandonment Notice	☐ Change Plans	-	and Aban	_	_	rily Abandon			
	Convert to Injection	□ Plug	Back		Water Di	sposal			
13. Describe Proposed or Completed Op If the proposal is to deepen direction Attach the Bond under which the wo following completion of the involved testing has been completed. Final A determined that the site is ready for	ally or recomplete horizontally, ork will be performed or provide d operations. If the operation res bandonment Notices shall be file	give subsurface the Bond No. or sults in a multiple	locations an file with B e completion	nd measured BLM/BIA. R on or recomp	and true ver Required sub eletion in a n	tical depths of all pertir sequent reports shall be ew interval, a Form 316	ent mar filed wi 0-4 shal	kers and thin 30 c I be filed	zones. days donce
TD: 6137' PBD: 5770' CIBP	- '								
SET CIBP @ 5442' W/35' CM CIRC HOLE W/PKR FLUID TEST TO 500# FOR 30 MINS IDLE WELL		* }	Pert	form Gicatio	MIT n fo	+ SUBMIT OF TA STA	- 105.		¥
ATTACHMENT: WELLBORE	SCHEMATIC EAU-N-90	1							
14. I hereby certify that the foregoing is	Electronic Submission #	35932 verified	by the BI	_M Well Inf	formation	System			
Cor	For BP AMERIC nmitted to AFMSS for proc					04AL0355SE)			
Name (Printed/Typed) KELLIE D	). MURRISH		Title A	UTHORIZ	ZED REPI	RESENTATIVE			
Signature (Electronic	Submission)		_	9440/2004	-				
	THIS SPACE FO	R FEDERA	L OF ST	TATE OF	FICE US	E			
Approved By /S/ J	oe G. Lara	P	Title	Petr	oleum	Engineer		10v 1	6 2004
Conditions of approval, if any, are attached certify that the applicant holds legal or eq which would entitle the applicant to cond	uitable title to those rights in the	not warrant or e subject lease	Office	CARL	LSBAD	FIELD OFF	CE		

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.

### Empire Abo Unit 'K' 17





## NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Director
Oil Conservation Division

Mark E. Fesmire, P.E.

Cabinet Secretary

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).

Oil Conservation Division \* 1301 W. Grand \* Artesia, New Mexico 88210 Phone: 505-748-1283 \* Fax: 505-748-9720 \* http://www.emnrd.state.nm.us

Sincerely,

Artesia OCD District Office

Thank you for your prompt attention to this matter and your efforts in helping to protect our environment and the infra-

\* Significant Non-Compliance events are reported directly to the U.S. Environmental Protection Agency, Region VI, Dallas, Texas.

The state of the s

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

#### 5. Lease Serial No.

SUNDRY NOTICES	SUNDRY NOTICES AND REPORTS ON WELLS					
Do not use this form for abandoned well. Use For				6. If Indian, All	ottee or Tribe Name	
SUBMIT IN TRIPLICATE -	Other instructions	on reverse side	RECEIVED	7. If Unit or CA	VAgreement, Name and/or N	
1. Type of Well  X Oil Well Gas Well Other			OCT 1 1 2005	8. Well Name a		
2. Name of Operator		OC.	D-MITERIA	EMPIRE ABO	UNIT 17	
BP America Production Company				9. API Well No	<i>.</i>	
3a. Address		3b. Phone No. (include	•	30.015.007		
P.O. Box 1089 Eunice NM 88231 4. Location of Well (Footage, Sec., T., R., M., or Survey I	Daggeintion)	505.394.160	00		Pool, or Exploratory Area	
				EMPIRE ABO		
NWSW, SEC 1, T18S, R27E, 1980' FSL	₹ 990, KMT			11. County or	Parish State	
				EDDY	NM NM	
12. CHECK APPROPRIATE	BOY(ES) TO INC	NCATE NATURE O	E NOTICE REP			
	BOX(E3) TO ME			011, 011 011	ILITORIA	
TYPE OF SUBMISSION			TYPE OF ACTION			
X Notice of Intent	Acidize	Deepen	Production	(Start/Resume)	Water Shut-Off	
45		= '	=			
Subsequent Report	Alter Casing	Fracture Treat	Reclamatio		Well Integrity	
	Casing Repair	New Construction	= :		X Other IDLR WELL	
Final Abandonment Notice	Change Plans	Plug and Abandon	n Temporaril	ly Abandon		
<del></del>	Convert to Injection	on Dlug Back	Water Disp	oosal	*	
determined that the final site is ready for final inspection.  TD: 6137' PBD: 6101' VERTICAL WHIPSTOCK PERFS: 040-6080'  BP America Production Company required and the Well issued by the New Mexical Action Due Date for this notice in the current scope of work include MIRUPU POH RODS & EQUIP REMOVE WHIPSTOCK & CIBP RIH W/PKR ASSY & SET BELOW HORIZOUTEST LOWER PERFORATED INTERVAL EVALUATE FINDINGS FROM LOWER ZONE	perfs: 5472-5  nuests a 60 day  ico Oil Conserv  s 11.01.05. }  s testing the p	ation Commission	e Notice of Vi . The Correct 6050-6080 by:	,	. NMOCD	
14. I hereby certify that the foregoing is true and correct		Title				
Name (Printed Typed)  Kellie D. Murrish		1	duler			
Tuis (1) 47)		Date 10.07				
THIS	SPACE FOR FED	ERAL OR STATE C				
Approved by	<del></del>	Title		Dat	te	
Conditions of approval, if any, are attached. Approval o certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations the	those rights in the subj	arrant or Office ect lease				

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

### UNITED STATES DEPARTMENT OF THE INTERIOR. Oil Cons. DIV-Dist. 2

FORM APPROVED OMB NO. 1004-0137

(April 2004) Expires March 31, 2007 BUREAU OF LAND MANAGEMENSO1 W. Grand Avenue Lease Serial No. SUNDRY NOTICES AND REPORTS ON WELLS NIV 88210 Name 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 SIGECEIVED 7. If Unit or CA/Agreement, Name and/or No. 1. Type of Well OCT 1 8 2005 X Oil Well 8. Well Name and No. Gas Well Other EMPIRE ABO UNIT 17 2. Name of Operator יאי BP America Production Company 9. API Well No. 3a. Address 3b. Phone No. (include area code) 30.015.00703 P.O. Box 1089 Eunice NM 88231 505.394.1600 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) EMPIRE ABO NWSW, SEC 1, T18S, R27E, 1980' FSL & 660' FWL 11. County or Parish, State CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Production (Start/Resume) Water Shut-Off X Notice of Intent Acidize Well Integrity Alter Casing Fracture Treat Subsequent Report Casing Repair **New Construction** Other IDLE WELL Change Plans Plug and Abandon Temporarily Abandon Final Abandonment Notice Convert to Injection Plug Back Water Disposal 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 cite is reached for final increasing.) determined that the final site is ready for final inspection.) TD: 6137' PBD: 6101' VERTICAL PERFS: 5472-5736' CIBP: 5823' WHITPSTOCK 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: MURUPU APPROVED FOR 2 MONTH PERIOD POH RODS & BOULP REMOVE WHIPSTOCK & CIBP ENDING 12/15/05 RIH W/PKR ASSY & SET BELOW HORIZONTAL SECTION TEST LOWER PERFORATED INTERVAL EVALUATE FINDINGS FROM LOWER ZONE

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)	Title	for record . Its
Kellie D. Murrish	Scheduler	
Luis D. W. Junes	Date 10.07.05	Verelynia
THIS SPACE	FOR FEDERAL OR STATE OFFICE USE	
Approved by	Title FIRE CALCIAN	Date OT + 0 200E

(ORIG. SGD.) ALEXIS C. SWOBODA 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. BETROLEUM ENGINEER | DCT 13 ZUUD KFO

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

### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

DEC 102008

FORM APPROVED OMB NO. 1004-0137 Expires March 31, 2007

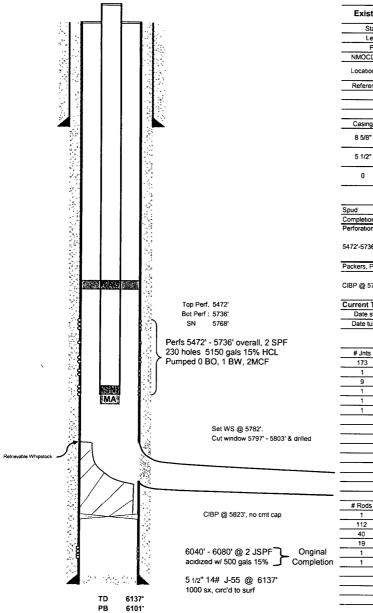
ARTESIA

5. Lease Serial No OCD-ARTES MANMO 557371 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals 7. If Unit or CA/Agreement, Name and/or No. SUBMIT IN TRIPLICATE - Other instructions on reverse side NMNM70945X Type of Well 8. Well Name and No. X Oil Well Gas Well Other Empire Abo Unit Name of Operator BP America Production Company 9. API Well No. 3b. Phone No. (include area code) 30-015-00703 10. Field and Pool, or Exploratory Area P.O. Box 1089 Eunice NM 88231 575-394-1648 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Empire Abo Unit Letter L, 1980 FSL & 660 FWL 11. County or Parish, State Section 1, T18S, R27E CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION X Notice of Intent Water Shut-Off Acıdize Production (Start/Resume) Alter Casing Fracture Treat Reclamation Well Integrity Subsequent Report Casing Repair New Construction Recomplete Other Change Plans Plug and Abandon Temporarily Abandon **Einal Abandonment Notice** Convert to Injection Plug Back Water Disposal 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 13. 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.) \*\* Remove Retrievable whipstock. Blace adequate determined that the final site is ready for final inspection.) \*\* Remove Retrievable whipsfock. place adequate cont to cap CIBP - Top of window. wor Top. (5823 - 5782)

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. Monitor well and assure it is stable. ND WH, NU BOP. Release TAC and TOH. 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). TOH to 3400' (Glorieta top = 3290'). Spot 25 sack balanced cement plug from 3400' - 3150'. TOH. TIH with bull plug and perf nipple on tubing. Tag Glorieta plug; re-spot if necessary. 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. TOH to 300' (Yates top = 172'). Fill 5 1/2" casing from 300' to surface with 30 sx Class C neat. TOH LD tubing. SEE ATTACHED FOR RD PU. 10. Install regulation dry-hole marker. Clean location and prepare location for Bin inspections ROVAL CEPTED FOR RECO I hereby certify that the foregoing is true and correct Name (Printed/Typed) Barry C. Price Area Operations Team Lead DEC 10 2008<sub>te</sub> 11/18/08 THIS SPACE FOR FEDERAL CIR STATE OFFICE USE NIGOCLE-Motrict II Althae Sh Approved by 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.

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 the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212 and 1212

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction



6101

Existing	WB Dia	Empire Abo Unit K-17				
Status	Prod	ucing	Operator	BP An	nenca	
Lease	Empire /	Abo Unit	Zone			
Field			API		-00703	
NMOCD	Empire Abi	Unit K-17	NMOCD			
Location	1980' FSL & 6	60 FWL, S-01	T-18S R-27E			
Reference						
KB		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	
0 3/0	24#/3-00	1400	750 \$X	''	Suii	
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 Perforation His	4/20/1959	o' - 6080')	Top Perf Bot Perf	5472' 5736'		
`	4/20/1959 story sehind cibp.6040 s, and Cement	)' - 6080')				
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Completion Perforation His 5472'-5736' (b Packers, Plug CIBP @ 5770' Current Tub	4/20/1959 story sehind cibp.6040 s, and Cement	oxes use dro	Bot Perf	5736'	ons	
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Completion Perforation His 5472-5736' (b Packers, Plugi CIBP @ 5770' Current Tub Date skett Date tubuk  # Jnts 173 1 9 1 1	4/20/1959 story ehind cibp.6040 s, and Cement .5823' sulars: Blue b checked ars checked Jbing and I Description of 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,47 2,3/67,47,47 2,3/67,47,47 2,3/67,47,47 2,3/67,47 2,3/67,47 2,3/67,47 2,3/67,47 2,3/67,47 2,3/67,47 2,3/67,47 2,3/67 2,3	oxes use dri 2/11/08 Rod Asser IBG Assembly 5 EUE 8 Rod I D.TAC 5 EUE 8 Rod I 5 EUE 8 Rod II 5 EUE 8 Rod II	pp down boxes by by mbly RKB bg	5736'  Iength, ft  12 00 5448 98 2 75 272 65 32 46 1 10	Top of Depi from KB, f 12 00 5460 98 5463 73 5736 38 5768.84 5769 94 5795 62 5795 62 5795.62 5795.62	
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Current Rod Design

Description of Rod Assembly RKB

11/4\* Des'x 22\* RR, w/11/22/X16\* RR liner

1:00\* FG, Rods with Couplings

1:508\* C, Sinker Bars

1:508\* C, Sinker Bars

Pump with gas anchor;

2 0 x 1 5 x 26' w/ gas stinger anchor 1"x10'

112

40 19

12 00

12.00

34.00

4234 00

5234.00

5709 00

5734.00 5770 00

5770 00

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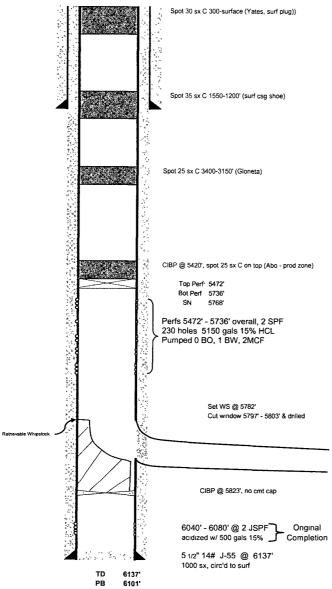
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Lease	
Lease   Empire Abo Unit   Zone   API   30-    NMOCD   Empire Abo Unit K-17   NMOCD     Location   1980' FSL & 660 FWL, S-01 T-18S R-27E     Reference   KB   3,582   TVD   6137'   PBTD     GL   3,569   MTD   Last CIBP     Casing   Weight/Grade   Depth   Cmt Sx   Hole     8 5/8"   24#/J-55   1468   750 sx   11"     5 1/2"   15.5#/J-55   6137   1000 sx   7 7/8"     0	015-00703  6101' 5770'  TOC surf  of the surf of the s
NMOCD	6101' 5770'  TOC surf o
Location	5770' TOC Surf O O O Siriptions
Reference   KB   3,582	5770' TOC Surf O O O Siriptions
KB   3,582   TVD   6137'   PBTD   GL   3,569   MTD   Last CIBP	5770' TOC Surf O O O Siriptions
Casing   Weight/Grade   Depth   Cmt Sx   Hole	5770' TOC Surf O O O Siriptions
Casing         Weight/Grade         Depth         Cmt Sx         Hole           8 5/8"         24#/J-55         1468         750 sx         11"           5 1/2"         15.5#/J-55         6137         1000 sx         77/8"           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 that the state of	TOC surf
8 5/8" 24#/J-55 1468 750 sx 11"  5 1/2" 15.5#/J-55 6137 1000 sx 7 7/8"  0 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 desc Date sketch checked 2/11/08 by: Date tubulars checked 2/11/08 by: Tubing and Rod Assembly RKB 12 173 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", 3/55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", 3/55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", 3/55 EUE'B Rida Tog (15/11) 5448	surf 0
8 5/8" 24#/J-55 1468 750 sx 11"  5 1/2" 15.5#/J-55 6137 1000 sx 7 7/8"  0 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 desc Date sketch checked 2/11/08 by: Date tubulars checked 2/11/08 by: Tubing and Rod Assembly RKB 12 173 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", J-55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", 3/55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", 3/55 EUE'B Rida Tog (15/11) 5448 1 2 3/8", 3/11", 3/55 EUE'B Rida Tog (15/11) 5448	surf 0
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Perforation History  5472-5736' (behind cibp.6040' - 6080')  Packers, Plugs, and Cernent.  Whipstock 5782-6812', CIBP @ 5823'  Current Tubulars: Blue boxes use drop down boxes for desc  Date sketch checked 2/11/08 by:  Date tubulars checked by  Tubing and Rod Assembly length, ft  173 2 3/67.47/#J-55 EUE'8 Rid-Tbg////////////////////////////////////	
# Jnts Description of TBG Assembly RKB 12 2.3/6*,47.7#.J-55 EUE'8 Rnd,Tbg 7.27 2.27 2.27 2.27 2.27 2.27 2.27 2.2	
Date sketch checked   2/11/08   by     Date tubulars checked   by     Tubing and Rod Assembly   length, ft     # Jints   Description of TBG Assembly   RKB   173   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (金属)   5448     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (金属)   272     9   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (金属)   272     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (金属)   32     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   32     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   32     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   32     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   32     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   32     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   32     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   32     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   32     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   33     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   33     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   33     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   33     1   2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log)   34	
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# Jnts Description of TBG Assembly RKB 12 173 2 3/8°, 4.7#.J-55.EUE/8 Rnd.Tbg	T ( C
173 2 3/8; 4.7#, J-55 EUE B Rid (Tog) (金融) 5448 1 2 3/8; X.5.5; OD (TAC 会社 连续) (金融) 2 9 2 3/8; 4.7#, J-55 EUE B Rid (Tog) (金融) 272 1 2 3/8; 4.7#, J-55 EUE B Rid (Tog) (金融) 32 1 2 3/8; API, SN, 经基本股份 (金融) 1	Top of Dept from KB, ft
1 2.386"X 5.5"、OD.TAC 除血上腺素。 22 9 2.395" 47# J-55 EUE'8 Rnd,Tbg 一致人员员 1 2.395" 47# J-55 EUE'8 Rnd (Tbg ) 22 1 2.395" 4PI-SN、定语、系统工作(Tbg ) 32 1 2.395" 4PI-SN、定语、系统工作(Tbg ) 32	00
9 2.3/8,4-7#, 3-55,EUE,8-Rnd,Tbg 272 1 2.3/8,4-7#,3-55,EUE'8-Rnd (PC,Tbg 32 1 2.3/8,4-PL,SN, 33 1 1 2.3/8,4-PL,SN, 34	
1 2,3/8/4/,7# J-55 EUE'8 Rnd IPC (Tbg增多数 32 1 2,3/8/API,SN, 23/8 温暖多彩 23/8/4/2 1 1	75 5460 98
1 2 3/8 API SN 1	
1 3.1/2":9.5# J-55 Slotted MA w/Bull Plug 25	
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Current Rod Design	
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1 1/4*Dia X 22*BR W/15/2*X 16* RR Inin 深流 22 112 1:00** FG. Rods with Couplings 深流 4200	
112 1.00" FG Rods with Couplings 4200 40 7/8" Dia "C" Rods 1000	
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1 1,5/8° C' Sinker Bars 25	
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 $2.0 \times 1.5 \times 26'$  w/ gas stinger anchor 1"x10"

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 <u>ninety (90)</u> days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90<sup>th</sup> day provide this office, prior to the 90<sup>th</sup> 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. <u>Notification:</u> 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. <u>Blowout Preventers</u>: 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. <u>Mud Requirement:</u> 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. <u>Cement Requirement</u>: 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. <u>Dry Hole Marker</u>: 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. <u>Subsequent Plugging Reporting:</u> 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. <u>Show date well was plugged.</u>
- 8. <u>Trash:</u> 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

FER 18 2009

FORM APPROVED OMB NO. 1004-0137 Expires March 31, 2007

5	Lease Serial No.	
NM	NM0557371	
	TCT 1: All as	- T N

SUBMIT IN TRIPLICATE - Other instructions on reverse side				NMNM0557371 6 If Indian, Allottee or Tribe Name			
Name of Coperation   Subsequent Report   Sub		Other instructions	on reverse side		_		
30.015-00703   30.0	X Oil Well Gas Well Other  2. Name of Operator				Empire Abo Unit 17		
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  TYPE OF ACTION    Notice of Intest   Aciduz	Address P.O. Box 1089 Eunice NM 88231 Location of Well (Footage, Sec., T., R., M., or Survey II) Unit Letter L, 1980 FSL & 660 FWL	•	rea code)	30-015-00703 10. Field and Pool, or Exploratory Area Empire Abo  11. County or Parish, State			
Notice of Intent	12. CHECK APPROPRIATE	12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REP					
Alter Casing   Fracture Treat   Reclamation   Well Integrity   Other Remove CIBP	TYPE OF SUBMISSION		TY	PE OF ACTION			
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/BIAR Required subsequent reports shall be filed or the standard or provide the Bond No on file with BLM/BIAR Required subsequent reports shall be filed or the standard or recompletion of the unvolved 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 Anadomient 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 MAS 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 tbp. 1/24/06: TIH w/ 43/6' bit picking up 66 it 2 7/8 BDP & 2 7/8 tbp 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 by bc tight be end of horizontal @ 7700' TOH laydown 2 7/8". 1/27/06: Pick up hook, bumper sub. jars, & 4 3 1/2" DC a 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		Alter Casing	Fracture Treat	Reclamation	on Well Integrity		
If the proposal is to deepen directionally or recomplete horizontally, give subsirface locations and measured and true vertical depths which the work will be performed or provide the Bond No on file with BLMR Required subsequent reports shall be filed vitima. 30 days following completion of the movived operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed vitimal 30 days following completion or the movived 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: kup 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 w/00. 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 NUMH. 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. W00. 2/6/06:  Pump 30 bbl while adding 2 jt to lower SN	Final Abandonment Notice				-		
Name (Printed/Typed)  Parry C. Price  Date 2/2/09  THIS SPACE FOR FEDERAL OR STATE OFFICE USE  Approved by  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  Area Operations, Feam-Leading Fig. 10 Fi	If the proposal is to deepen directionally or recomp Attach the Bond under which the work will be per following completion of the involved operations. I testing has been completed. Final Abandonment Metermined that the final site is ready for final inspect SUBSEQUENT REPORT FOR THIS WORK WEPORT NOW BEING SUBMITTED TO UPD 7/8' rods, 82 3/4' rods, 10 7/8' laydown prod tbg. 1/24/06: TIH w/ 1/25/06: RU foam air unit break cdrlg on CIBP. Plug turned loose if TIH push CIBP to end of horizonta & 4 3 1/2" DC - TIH w/tbg fish fo 1/30/06: TIH w/ box tap, BS, Jars whipstock loose kept pulling off. TIH w/ work string & laydown same 5000 psi below slips. 2/2/06: ND rod out load & test to 500 psi-ok psi-ok-still no pump action. 2/3/Pump 30 bbl while adding 2 jt to 2/8/06: Run pump & rods L&T to 50	olete horizontally, give sifermed or provide the Efformed or provide the Efformed or provide the Efformed or provide the Efformed or provide the Efformed or provide the Efformed or provide the Efformed of t	ibsurface locations and measond No on file with BLM a multiple completion or ry after all requirements, in 1/20/06: MIRUPU.  D. Prep to NU BOP. Ting up 66 jt 2 7/2 ag CIBP @ 5768' b 5779' circ clean by 1/20/06: MIRUPU.  D. Strong up 66 jt 2 7/2 ag CIBP @ 5768' b 5779' circ clean by 1/2 ag CIBP @ 5768' b 1/2 ag CIBP @ 5768' b 1/2 ag CIBP @ 5768' b 1/2 ag Whipstock of the strong whipstock	sured and true ve ecompletion in a cluding reclamation of the cluding recla	rtical depths of all pertiment markers and zones subsequent reports shall be filed within 30 days new interval, a Form 3160-4 shall be filed once on, have been completed, and the operator has FILE OR NOTIFY OF RTP.  o lay down 66-1' rods, 69 NDWH NU BOP release TAC 8 tbg workstring to 5100'. RU power swivel start blow well down. 1/26/06: up hook, bumper sub, jars, nook prep to run box tap. To k over fish try to work power swivel - laydown DC - 3/8 prod tbg test in hole well out left 7' of polish water - load test to 500 level dry. WOO. 2/6/06: Swab test still no fluid.		
Approved by  Title  Tit	Name (Printed/Typed)			ponations T	On A A Complete State of the Complete State		
THIS SPACE FOR FEDERAL OR STATE OFFICE USE  Approved by  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  FI Bate 1 6 2009  Office	Anch Ch						
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	THIS	SPACE FOR FED		FICE USE			
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					FI Batel 6 2009		
TO THE PROPERTY OF THE PROPERT	certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations the	those rights in the subjecteon	ect lease		4 Como		

FOR RECORDS ONLY



Form 3160-5 (February 2005)

### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD-AR	TESIA
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FORM APPROVED OMB No. 1004-0137

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APPROVED	
1004-0137	

OMB No. 1004-0137 Expires: March 31, 2007 Expires: March 31, 2007

	NMNM0557371			
SUNDRY NOTICES AND REPORT Do not use this form for proposals to d abandoned well. Use Form 3160-3 (APD	6. If Indian, Allottee	or Tribe Name		
SUBMIT IN TRIPLICATE – Other inst		_	reement, Name and/or No.	
1. Type of Well		NMNM7094	45X 	
✓ Oil Well Gas Well Other		8. Well Name and N EMPIRE Al	lo. BO UNIT K 17	
2. Name of Operator BP AMERICA PRODUCTION COMPANY	9. API Well No.	0-015-00703		
3a. Address P.O. BOX 1089, EUNICE NM 88231 3b.	Phone No. (include area code) 575-394-1648	10. Field and Pool of EMPIRE	•	
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		11. Country or Paris	h, State	
UNIT LETTER L, 1980 FSL & 660 FWL, SECTION 1, T18S, R27E		EDDY	NM	
12. CHECK THE APPROPRIATE BOX(E	S) TO INDICATE NATURE OF NOT	CE, REPORT OR OT	HER DATA	
TYPE OF SUBMISSION	TYPE OF AC	TION		
Notice of Intent Acidize	Deepen Pro	duction (Start/Resume)	Water Shut-Off	
Alter Casing	Fracture Treat Rec	lamation	Well Integrity	
Subsequent Report Casing Repair	New Construction Rec	omplete	Other	
Change Plans	Plug and Abandon Ter	nporarily Abandon		
Final Abandonment Notice Convert to Injection	Plug Back Wa	ter Disposal		
testing has been completed. Final Abandonment Notices must be fil determined that the site is ready for final inspection.)  3/12/09: ND WH. RELEASE TAC. NU BOP. POH LAY!! 3/13/09: RIH W/ 4 3/4" BIT, CSG SCRAPER & 185 JTS 3/16/09: KILL WELL W/ 20 BBL BRINE. POH W/ 2 STA SCRAPER. RIH W/ CIBP & TBG. SET CIBP @ 20 SX CMT ON VACUUM. DISPLACED W/ 20 TBG. FLUSH TBG W/ 10 BBL FRESH WATEF 3/17/09: POH W/ TBG. RIH W/ CIBP & 2 3/8" TBG. SE WATER. TEST TO 500 PSI. TEST GOOD. SP TBG. DISPLACE CSG FROM 5160' TO SURF FROM 3416' TO 3175'. POH W/ TBG & SETTI 3/18/09: RIH W/ TBG. TAG CMT @ 3152'. LAY DOWN CMT FROM 1566' TO SURF. POH LAYING DOWN CMT FROM 15	NG DOWN TBG: 2 3/8" TBG TO 5787'. POH W/ TB: NDS TBG. POH W/ TBG & SCRAF 0 5770'. PUMP 25 BBL FRESH WA BBL FRESH WATER ON VACUUI C ON VACUUM. C CIBP @ 5420'. DISPLACE CSG N OT 25 SX CMT FROM 5420' TO 5- ACE. POH LAYING DOWN TBG TI NG TOOL. RIH W/ SLOTTED SUB 51 JTS TBG TO 1566'. MIX & PUM DWN TBG. ND BOP. TOP OFF CS L ANCHORS AND WELL HEAD, N	G TO 3523'.  VER. LAY DOWN TER ON VACUUM. I M. POH LAYING DO W/ FRESH 79'. LAY DOWN 8 J D 3416'. SPOT 25 S: ON 2 3/8" TBG. IP 170 SX G W/ 5 SX CMT. RD VELD IN PLATE,  Approved as Liability unde	PUMP WN 11 JTS ITS X CMT	
14. I hereby certify that the foregoing is true and correct.  Name (Printed/Typed)  BARRY C. PRICE	Title AREA OPERA	TIONS TEAM LEAD		
Signature Dany C. Tur	Date 03/23/2009		APPROVED	
// THIS SPACE FO	R FEDERAL OR STATE OF	FICE USE		
Approved by	Trtle		MAR 2 6 2009	
Conditions of approval, if any, are attached Approval of this notice does not that the applicant holds legal or equitable title to those rights in the subject leaentitle the applicant to conduct operations thereon	warrant or certify		JAMES A. AMOS SUPERVISOR-EPS	

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 ?)

3/31/09

Form 3160-5 (April 2004)

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

1	FORM APPROVED
	OMB NO. 1004-013
OCD-ARTESIA	Expires March 31, 200
5. I	ease Serial No.
APR 15 20 SIMN	MAEE 7271

### SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for abandoned well. Use For	proposals to drill	or to re-	enter an		' O ZU	6. If Indian,	Allottee	or Tribe	Name
SUBMIT IN TRIPLICATE -						7. If Unit or CA/Agreement, Name and/or N NMNM70945X			Name and/or No
1. Type of Well  X Oil Well Gas Well Other  2. Name of Operator BP America Production Company		8. Well Name and No. Empire Abo Unit 17 K 9. API Well No.					7		
3a. Address  P.O. Box 1089 Eunice NM 88231  4. Location of Well (Footage, Sec., T., R., M., or Survey of Unit Letter L, 1980 FSL & 660 FWL	Description)	1	ne No. ( <i>include ar</i> 75 - 394 - 1648	rea code) 		30-015-00 10. Field an Empire Al	d Pool, DO		atory Area
Section 1, T18S, R27E						11. County Eddy			NM
12. CHECK APPROPRIATE TYPE OF SUBMISSION	BOX(ES) TO IND	DICATE		NOTICE PE OF A		ORT, OR O	THER	DATA	
Subsequent Report  X Final Abandonment Notice  X Final Abandonment Notice  X Final Abandonment Notice  If the proposal is to deepen directionally or recomp Attach the Bond under which the work will be per following completion of the involved operations. I testing has been completed Final Abandonment Metermined that the final site is ready for final inspections. Per BLM letter referencing this wabandonment.	blete horizontally, give s rformed or provide the if the operation results i Notices shall be filed or ction.)	ils, includi ubsurface Bond No. n a multipally after al	locations and meason file with BLM. le completion or relative requirements, incompletion of the second requirements.	ng date o	Reclamation Recomplete Femporarily Water Dispo of any proj t true vert equired si ion in a neclamation	osal  posed work a  cical depths of  ubsequent rep  ew interval, a  n, have been	f all per orts sh. Form comple	tinent mar all be filed 3160-4 sha ted, and th	uration thereof. kers and zones within 30 days all be filed once he operator has
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)  Bastry C. Price  THIS	S SPACE FOR FEE	Da	Area 0			JAM SUPE	ES A. RVIS	AMOS OR-EPS	
Approved by			Title			=	Date		
Conditions of approval, if any, are attached Approval of certify that the applicant holds legal or equitable title to	f this notice does not w	arrant or	Office			L			

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, 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





### **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	YEAI	R MOI	OA ORIG TII	TAJ TAJ	LONG	DEI	? MAGNITUDE	IEM DTSVNWG NFO TF	DIST km
PDE	1973	09 2	22 233835.80	24 407	706.00				
PDE	1974				-106.95	5	3.1 MLGS	• • • • • • • • • • • • • • • • • • • •	314
PDE	1975		1 072757.30		-104.14	5	3.7 MLGS	• • • • • • • • • • • • • • • • • • • •	51
PDE	1976	•	9 040330.50		-104.01 -103.08	5	3.0 LgTUL	.F	150
PDE	1976	01 2	2 072157		-103.08	1	3.5 MDGS	.F	145
PDE	1976	01 2			-103.07	1	2.8 MDGS	• • • • • • • • • • • • • • • • • • • •	1.45
PDE	1977				-103.08	2 5	3.9 MDGS	5F	145
PDE	1977		6 090307.30	-	-103.08	5 4	3.2 MLGS	5F	256
PDE	1977	11 2			-100.84	4 5	3.3 MLGS	.F	144
PDE	1978	03 0:			-102.51	11	3.5 MLGS	••••••••	318
PDE	1979	07 0			-102.31	4	3.5 MLGS	.F	210
PDE	1980	03 23	2 004912.50		-105.92	5	2.7 UKTUL	.н	312
PDE	1981	05 09			-107.03	5 5	3.4 MLGS 3.1 MLGS	4F	255
PDE	1982	01 04			-102.49	5		5F	293
PDE	1982	03 16			-103.27	5	3.9 LgTUL 3.1 LgTUL	3F	240
PDE	1982	04 26	083147.79		-100.84	5	2.8 LgGS	3F	300
PDE .	1982	05 18			-106.95	9	2.8 MLGS		318
PDE	1982	05 18			-106.90	6	2.8 MLGS	.F	296
PDE	1982	05 24	063251.70		-106.95	6	2.9 MLGS	.F	293
PDE	1982	09 20			-107.06	11	3.5 LgTUL	.F	295
PDE	1982	10 07	124125.99		-106.82	4	2.4 MLGS	4F	293
PDE	1982	11 28	023648.51		-100.84	_	3.3 LgTUL	.F	294
PDE	1983	03 02	232219.40		-106.89		4.3 LgTUL	4F	318
PDE	1983		<del> </del>	33.32 -			3.5 MLGS		299
PDE	1983	09 15	232536.05	35.14 -			3.2 LgTUL	5F	214
PDE	1983		074408.43	35.24 -			2.7 MDGS		263
PDE	1984		133113.54	35.07 -			3.1 LgTUL	*** *****	274
PDE	1984		021954	34.31 ~			2.9 MLGS	.F	314
PDE	1984	12 04	203636.02	32.26 ~			2.9 MLGS		292
PDE	1985	06 05	103600.60	32.56 -			2.9 MLGLD	4F	84
PDE	1985	06 27	182000.03	33.62 -			3.4 LgGs		252
PDE	1985	08 16	145652.96	34.13 -			1.1 MLGS	E	229
						•	-, - PILIGO	6D	284

PDE	198			5 2.6 MDG	LD .F	255
PDE	198			5 3.6 LgT		
PDE	198	6 04 17 210430.3	0 32.59 -106.91			
PDE	198	6 04 28 130016	34.01 -106.82			
PDE	198		8 35.16 -105.09			
PDE	198					
PDE	1988		35.12 -105.96			
PDE	1.989					304
PDE	1,989					271
PDE						309
	1990				几 6D	308
PDE	1990				几 5F	306
PDE	1990		4 34.01 -106.54	5 3.6 MLG		255
PDE	1990		33.95 -106.59	5 3.9 MDS1		255
PDE	1990	05 05 162622.8	34.45 -106.88	6 3.6 MDS1		307
PDE	1990	07 21 192822.79	34.46 -106.86	11 3.0 MDS1		
PDE	1990					306
PDE	1990					306
PDE	1990			7 3.2 MDSN		306
PDE	1990			10 3.7 MDSN		281
PDE				7 3.3 MDSN		307
	1990	, ,		6 4.3 MDSN	M 4F	306
PDE	1990			8 3.1 MDSN	M F	306
PDE	1990			7 3.1 MDSN		305
PDE	1990	11 15 072524.38		6 3.6 MDSN		306
PDE	1990	12 05 033644.30	34.45 -106.86	8 2.6 MDSN		306
PDE	1991	03 05 201711.40	34.44 -106.87	9 2.9 MDSN		
PDE	1991	03 06 143659.07		7 2.5 MDSN		306
PDE	1991	06 05 184414.90		4 3.0 MDSN		307
PDE	1991	06 20 1605	33.62 -106.47			305
PDE	1991	12 09 124716.50		0 3.5 MLGS	E	229
PDE	1992	01 02 114535.61		14 3.1 LgTU		314
PDE	1992			5 5.0 LgTU		116
PDE		02 23 161752.51		5 3.4 LgTU		264
	1992	08 24 012535.20	34.01 -106.86	5 2.6 MDSN	4 .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 MDSN		226
PDE	1993	12 22 192511.39	33.33 -105.68	10 3.2 MDSN		
PDE	1994	01 01 025131.29	34.44 -106.98	10 2.5 MDSNN		148
PDE	1995	03 19 183643.97	35.00 -104.21	5 3.3 LgGS		314
PDE	1.995	04 14 003256.17	30.28 -103.35	17 5.7 MwGS		246
PDE	1995	04 14 011148.40	30.30 ~103.35		6CM	287
PDE	1995	04 14 021426		10 2.7 LgGS	• • • • • • • • • •	286
PDE	1995	04 14 021938.50	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			30.30 -103.35	10 2.6 LgGS	.F	286
	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	
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		286
PDE	1995	04 15 143329.51	30.27 -103.32		.F	286
PDE	1995	04 16 004043.30		10 4.0 LgGs	6D	290
PDE	1995	04 16 102625.50		10 2.3 LgGS	• • • • • • • • • •	286
PDE	1995	04 16 161609.60		10 2.5 LgGS		286
PDE	1995			10 2.4 LgGS		286
PDE		04 17 085000.50		10 2.5 LgGS		286
	1995	04 21 044144		10 2.9 LgGS	3F	286
PDE	1995	06 01 010615.70		10 3.5 LgGS	4F	286
PDE		07 06 024151		10 2.7 LgGS	.F	286
PDE	1995	07 06 024704	30.30 ~103.35	10 2.6 LgGS	.F	286
				~	· · · · · · · ·	

PDE	199			3 2.8 LgGS	5F	297
PDE	1999	5 11 12 174559.40	30.30 -103.35	10 3.6 LgGS		286
PDE	1996	6 03 15 131757.22	33.59 -105.69	10 2.9 LgGS		
PDE	1996			10 3.5 LgGS		163
PDE	1996					212
PDE	1996			10 3.7 LgGs		214
PDE				10 3.5 LgGS		209
	1997			10 3.2 LgGS		210
PDE	1997			5 3.5 MLGS	.F	264
PDE	1997			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		10 3.6 LgGS	.F	299
PDE	1998			5 3.0 MDSN		
PDE	1999			1 2.9 LgGS		293
PDE	1999	03 14 224317.97		_	• • • • • • • • • • • • • • • • • • •	45
PDE	1999	03 17 122923.11			_	42
PDE	1999	05 30 190425.60		1 3.5 MDSNI	_	46
PDE	1999			10 3.9 MDSN		45
PDE		,		5 2.9 MDSN	1	40
	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	
PDE	2004	05 24 213628.56	34.47 -106.90	5 3.5 MLGS	.F	41
PDE	2004	06 22 085528.23	32.53 -104.58	5 3.7 LgGS	.F	310
PDE	2004	08 26 184518.62	32.58 ~104.50	5 3.4 MLGS		42
PDE	2004	10 28 025904.82	32.50 -104.50		• • • • • • • • • • • • • • • • • • • •	33
PDE	2004	11 14 212749.90		5 3.0 LgGS	• • • • • • • • • •	31
PDE	2004	10 30 025734.81	33.25 -106.20	5 3.5 LgGS		191
PDE	2005		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		12 22 143011.67	32.58 -104.57	5 3.6 LgGs	.F	37
	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	
PDE	2008	01 29 102453.24	32.90 -100.84	5 3.3 LgGS	.F	289
PDE	2008	02 18 1415	32.27 -101.42	0 2.1 LgGS		317
PDE	2008	04 16 090604.36	33.66 -106.06		.CE	269
PDE	2008	05 23 180305.86		5 2.7 MLGS	*** *****	196
PDE	2008	07 18 173109.40	32.50 -104.60	5 2.7 LgGS	• • • • • • • • • • • • • • • • • • • •	45
PDE	2008	72 20 205650 20	32.89 -100.84	5 2.7 LgGS	• • • • • • • • • •	317
PDE		12 28 205659.99	30.44 ~103.36	5 2.6 MLGS	• • • • • • • • • • •	271
	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	
PDE	2010	02 21 095539.77	32.57 -104.61	5 2.8 LgGS		318
PDE	2010	03 28 000355.08	32.44 -104.50	4 4.1 MWRMT	3FM	41
PDE			32.41 -101.06	5 2.9 LgGS		44
		· · • •		- a., nges		300

PDE	2010		12 002005.9			2.8 LgGS		314
PDE	2010		09 071807.3		3 5	2.1 MLGS	.F	279
PDE	2010		27 204721.8		3 5	3.7 MLGS	•••	223
PDE	2010		31 215819.1		l. 5	4.0 MLGS		44
PDE	2010		08 011238.0		5 5	3.4 MWRMT	2FM	316
PDE	2010	08	25 020514.3	2 32.95 -100.86	5 5	2.8 LgGS	*** *****	315
PDE	2010	08	29 124836.6					310
PDE-V	V 2010	10	09 074227.63	3 32.93 -100.89	5		• • • • • • • • • • • • • • • • • • • •	313
PDE-W	V 2010	10	26 065629.7					316
PDE-W	2010		01 091058.43					320
PDE-W	2011	01	11 043415.7	7 34.39 -106.99	5	_		312
PDE-W	2011		17 182534.43				*** ******	307
PDE-W	2011		01 033012.76			3.1 LgGS	2F	317
PDE-W	2011		01 063159.89			2.5 LgGS		321
PDE-W	2011		12 152200.86			3.0 LgGS	• • • • • • • • • • • • • • • • • • • •	312
PDE-W	2011		14 001948.80			3.0 LgGS		320
PDE-W	2011		28 091211.95			3.0 LgGS		
PDE-W	2011		06 233835.45			3.2 MLGS		320
PDE-W	2011		25 165631.88			2.5 LqGS	• • • • • • • • • • • • • • • • • • • •	315
PDE-W	2011		28 010341.97			4.4 mbGS	.F	317
PDE-W	2011		28 035625.61			4.0 mbGS		264
PDE-W	2011		28 045834.59			3.6 MWRMT		268
PDE-W	2011		28 074903.45			3.1 LgGS		272 262
PDE-W	2011		28 075418.94			2.7 LgGS		
PDE-W	2011		30 010716.82			4.6 MDUNM	• • • • • • • • • •	286
PDE-W	2011		2 114328.24		10	4.2 MWRMT	2FM	265
PDE-W	2011		2 115836.35		10	3.3 MLGS		266
PDE-W	2011		2 134032.64		10	3.3 MLGS	*** ******	264
PDE-W	2011		2 135536.79		5	4.4 mbGS	· · · · · · · · · · · · · · · · · · ·	271
PDE-W	2011		3 025830.18		10	3.8 MWRMT	2F	264
PDE-W	2011		3 114203.84		10	2.8 MLGS	.FM	273
PDE-W	2011		4 162627.03	30.71 ~105.79	10	3.7 MwRMT	 M	287
PDE-W	2011		5 052010.02	30.79 -105.76	10	3.6 MLGS		271
PDE-W	2011		6 002426.09	30.75 -105.73	10	2.8 MLGS	*** ******	262
PDE-W	2011		6 004559.26	30.81 -105.71	10	2.8 MLGS	*** ******	264
PDE-W	2011		7 045100.88	30.64 -105.73	10	4.1 MDUNM	2F	258
PDE-W	2011		8 132449.65	30.75 -105.81	10	3.1 MLGS		275
PDE-W	2011		8 134616.49	30.72 -105.76	10	3.2 MLGS		269
PDE-W	2011		8 135758.52	30.72 -105.76	10	2.9 MLGS		269
PDE~W	2011		8 190732.13	30.81 -105.31	10	3.0 MLGS	• • • • • • • • • •	269
PDE-W	2011		8 225459.93	30.74 -105.74	10	3.3 MLGS	• • • • • • • • • • • • • • • • • • • •	239
PDE-W	2011		9 064019.15	30.76 -105.69	10	3.9 MDUNM		266
PDE-W	2011		0 184118.44	30.72 -105.72	10	3.4 MLGS	.F	261
PDE-W	2011		3 124916.26	30.76 -105.45	1.0	2.6 MLGS	• • • • • • • • • • • • • • • • • • • •	267
PDE-W	2011		4 220751.11	30.82 -105.74	10	3.9 MDUNM	.F	250
PDE-W	2011		7 200820	30.75 -105.74	10	4.2 MDUNM		259
PDE-W	2011		9 103523.51	30.80 -105.69	10	3.4 MwRMT	M	265
PDE-W	2011		115649.90	30.72 -105.59	10	2.9 MLGS		258
PDE-W	2011		231419.06	30.20 -105.55	10	2.7 MLGS	• • • • • • • • • • • • • • • • • • • •	260
PDE-W	2011		100301.09	30.70 -105.63	10	2.8 MLGS		310
PDE-W	2011		7 014128.20	30.80 -105.76	10	3.6 MLGS		264
PDE-W	2011		014908.92	30.98 -105.78	10		• • • • • • • • • • • • • • • • • • • •	261
PDE-W	2011		102913.60	32.93 -100.81	5	3.0 MLGS 2.5 LgGS	•••	246
PDE-W	2011		183635.11	32.74 -100.84	5	2.5 LgGS 2.5 LgGS		321
PDE-W	2011		203158.11	32.89 ~100.85	5 5	2.8 LgGS	3F 2F	318
PDE-W	2011		003149.11	32.80 -100.88	5			316
PDE-W	2011		022931.34	32.73 -100.85		2.7 LgGS	2F	314
PDE-W			091946.71	32.85 -100.85		2.5 LgGS 2.6 LgGS	.н	317
PDE-W			092612.90	32.76 -100.84		2.6 LgGS 2.7 LgGS		316
PDE-W			141834.05	32.82 -100.87		3.4 LgGS	2F	317
			=		,	a.a naaa	3F	314

PDE-W	2011	09 28	214637.55	32.52 -104.66	-	0 5 5 60		
					5	2.7 LgGS		48
PDE-W	2011	11 24	064959.99	32.95 ~100.81	5	2.8 LqGS		320
PDE-W	2011	11 24	231549.01	32.94 -100.85	-		*** ******	
PDE-W					5	3.1 LgGS		317
EDE-M	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	•		
22222 57	0011				3	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	-		
PDE-W						2.5 LgGS	.F	318
PDE-W	2012	0T T2	092901.68	31.23 -103.61	5	2.7 LqGS	2F	181
PDE-W	2012	01 24	182102.61	30.32 -103.38	5	3.6 LqGS		
PDE-W	2012				_	_	4F	283
		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		
PDE-W	2012				_		3F	223
	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		
·-			***	32.37 100.03	~	ממנות כיי	.F	219

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