

UIC - I - 8-1, 2 & 3

WDWs-1, 2 & 3

PERMITS,

RENEWALS,

& MODS (4 of 18)

2017

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SUNDRY NOTICES AND REPORTS ON WELLSDo 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

FORM APPROVED
OMB NO. 1004-0135
EFFECTIVE DATE: NOVEMBER 30, 2000

1a. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	JUL 21 2008 OCD-ARTESIA
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY, LP	
3. Address and Telephone No. 20 North Broadway, Oklahoma City, OK 73102 405-552-8198	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* 660' FNL & 990' FEL Section 12 T18S R27E, Unit A	
5. Lease Serial No. NM-42410	
6. If Indian, Allottee or Tribe Name	
7. Unit or CA Agreement Name and No.	
8. Well Name and No. Federal T 1	
9. API Well No. 30-015-26404	
10. Field and Pool, or Exploratory Wolfcamp	
12. County or Parish 13. State Eddy NM	

CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input checked="" type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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

Devon Energy Production Company, LP is preparing Form C108, Application for Authorization to Inject that will be filed with the Oil Conservation Division, Santa Fe, New Mexico office. Devon is proposing to convert the Federal T #1 well to SWD in the Lower Wolfcamp and Cisco zones from 7400' to 8200'. The BLM has been sent a copy of C108 application filed with the OCD.

1. RIH and drill out CIBP's at 6,800', 7,078', & 7,265'.
2. Perform injection step rate test in the Lower Wolfcamp.
3. Drill out CIBP at 7,560' and cement retainers at 7,745', 7,780', & 7,820', & 8,000'.
4. Perforate / Reperforate Cisco with casing gun, 0.42" EHD, 2 spf from 7,893'-7,899'; 7,902'-7,907'; 7,910'-7,916'; 7,919'-7,927'; 7,932'-7,959'; 7,965'-7,967'; 7,971'-7,972'; 7,976'-7,978'; 8,034'-8,042'; 8,055'-8,060'; 8160'-8164'.
5. Frac as recommended.
6. RIH with RBP and set at +/- 7,865'.
7. Perforate / Reperforate Cisco with casing gun, 0.42" EHD, 2 spf at 7,758'-7,768'; 7,790'-7,798'; 7,800'-7,818'; 7,832'-7,840'.
8. Frac as per recommended.
9. POOH with RBP and RIH with tubing and packer. Set packer at 7,600'. Perform injection step rate test in Cisco.
10. Tie in disposal line routed from West Red Lake SWD Battery and establish injection.

* Either, return the well to active status by 11-16-08 or submit plans for abandonment.

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

Signed [Signature] Name Norvella Adams
Title Sr. Staff Engineering TechnicianDate 6/12/2008

(This space for Federal or State Office use)

Approved by [Signature] Title [Signature]

Conditions of approval, if any:

Date JUL 16 2008

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JAMES A. AMOS
SUPERVISOR EPS

*See Instruction on Reverse Side

Accepted for record - NMOCD

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-015-26404	
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name Federal T	
8. Well Number 1	
9. OGRID Number 6137	
10. Pool name or Wildcat L. Wolfcamp and Cisco 96136	
4. Well Location Unit Letter <u>A</u> : <u>660'</u> feet from the <u>NORTH</u> line and <u>990'</u> feet from the <u>EAST</u> line Section <u>12</u> Township <u>18S</u> Range <u>27E</u> NMPM County <u>Eddy</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3709' KB; 3697' GL	
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>	
Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____	
Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER <input checked="" type="checkbox"/> Convert to SWD, Admin. Order SWD-1135	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

8/04/08 RU unit. ND wellhead and NU BOP. TIH with bit and drill collars.
8/05/08 Drill CIBP at 6800' and 7078'.
8/06/08 Drilled through cement at 7525', CIBP at 7300' and cement at 7560' and CIBP at 7595'.
8/07/08 Ran step rate test; pumped 50 bbls at 1/2 bbl/min - 0# psi, pumped 50 bbls at 1 bbl/min -20# psi, pumped 50 bbls at 2 bbls/min - 75# psi, pumped 50 bbls at 3 bbls/min - 170# psi, pumped 50 bbls at 4 bbls/min - 250 psi.
8/08/08 Trucked in and established injection in the Wolfcamp at 150 BWPD at 170 psi.
8/11/08 Drilled cement retainers at 7745', and 7780'.
8/12/08 Drilled cement retainer at 7820' and 8000'. Circulate hole and TOH with tubing and bit.
8/13/08 Perforate Cisco from 7893' - 8060'; total 140 holes. TIH and set packer at 7688'. Frac with 5,040 gals 15% HCl + 120,372 gals Spectra Star 2500 + 167,552 # 20/40 White sand.
8/14/08 TIH with retrievable tool and latch onto packer. Release packer and TOOHP with packer and tubing. RU wireline and perforate Cisco from 7758'-7840'; 228 total holes.
8/15/08 TIH with packer and set at 7582'. NU frac valve.
8/16/08 Frac 7758'-8060' with 4500 gals 15% Spearhead acid + 119,255 gals Spectra 2500 + 106,750 # 20/40 100% White sand. RD.
8/18/08 Release packer. TOOHP with packer and tubing.
8/20/08 TIH with bailer and bailed sand. Bailed sand to 8460'. TOOHP with tubing. ND BOP and NU flange. Waiting on tubing.
9/15/08 TIH with packer and tubing. Set packer at 6789'. ND BOP and NU tree. Ran MIT test to 500 # for 30 minutes - ok, notified Mike Bratcher with OCD. TOOHP with tubing. RIH with 3 1/2" IPC tubing and set at 6789'. Injection line installation in progress.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Norvella Adams TITLE Sr. Staff Engineering Technician DATE 9/17/08
Type or print name Norvella Adams E-mail address: norvella.adams@dmv.com Telephone No. 405-552-8198

For State Use Only

APPROVED BY: _____ TITLE Accepted for record DATE _____
Conditions of Approval (if any): NMOCD

DEVON ENERGY PRODUCTION COMPANY LP

Well Name: FEDERAL T #1		Field: NORTH ILLINOIS CAMP MORROW	
Location: 660' FNL & 990' FEL; SEC 12-T18S-R27E		County: EDDY	State: NM
Elevation: 3634' KB; 3618' GL		Spud Date: 6/28/90	Compl Date: 9/13/90
API#: 30-015-26404	Prepared by: Norvella Adams	Date: 9/17/08	Rev:

**Current Schematic
L. Wolfcamp and Cisco SWD**

17-1/2" Hole
13-3/8", 68#, LTC, @ 472'
Cmt'd w/450 Sx. Circ to surface

12-1/4" Hole
8-5/8", J55, 32#, STC, @ 2,589'
Cmt'd w/900 Sx. Circ to surface

WOLFCAMP (8/21/93)
6,868' - 7,038'

WOLFCAMP (8/18/93)
7,092' - 7,097'; 7,120' - 7,146'

WOLFCAMP (8/16/93)
7,330' - 7,340'; 7,350' - 7,360'

SWD Perforations:
CISCO (8/1/93)
7,685' - 7,695'

CISCO (7/30/93)
7,760' - 7,768'

CISCO (7/28/93)
7,790' - 7,798'

CISCO (7/25/93)
7,932' - 7,940'

CISCO (7/22/93)
8,034' - 8,042'
8,055' - 8,060'

4" Liner top @ 9,055'

7-7/8" Hole
5-1/2", N80, 17#, LTC, @ 9,473'
Cmt'd w/430 Sx

MORROW (9/14/90)
10,008' - 10,014'
10,038' - 10,054'

4-3/4" Hole
4" 10.46#, L80 Liner @ 9,055' - 10,141'
Cmt'd w/80 Sx

Formation Tops

Morrow 9,600'-10,250'
Atoka 9,230'- 9,700'
Upper Wolfcamp 6,400' - 7,200'
Abo 5,600' - 6,200'
Yeso 3,300' - 3,900'
San Andres 2,000' - 2,800'
Queen 1,450' - 1,650'

3-1/2", 9.3 #, N80, Injection tubing @ 6789'

5-1/2" IPC Packer @ 6,789'

Frac 7758'-7840' with 4500 gals 15% Spearhead acid and 119,255 gals Spectra Star 2500 + 106,750 # 100% 20/40 White sand.

Frac 7893'-8060' with 5040 gals 15% HCl acid and 120,372 gals Spectra Star 2500 + 167,552 # 100% 20/40 White sand.

35' cement. 9,005' PBD
CIBP @ 9,040' (7/21/93)

CIBP @ 9,950' (7/19/93)

10,100' PBD

10,141' TD

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

OCT 07 2008

OCD-ARTESIA

OCT 07 2008

OCD-ARTESIA

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:

Oil Conservation Division * 1220 South St. Francis Drive
* Santa Fe, New Mexico 87505
* Phone: (505) 476-3440 * Fax (505) 476-3462* <http://www.emnrd.state.nm.us>



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/wvj

cc: Oil Conservation Division – Artesia
Bureau of Land Management – Carlsbad

SEP 19 2008

Submit to Appropriate District Office
 State Lease - 6 copies
 Fee Lease - 5 copies
 District I
 1625 N French Dr, Hobbs, NM 88240
 District II
 1301 W Grand Avenue, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd, Aztec, NM 87410
 District IV
 1220 S St Francis Dr, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

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

OCD-ARTESIA

Form C-105
 Revised June 10, 2003

S

Well API No. **30-015-26404**
 5. Indicate Type of Lease
☐ STATE ☐ FEE
 State Oil & gas Lease No

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input checked="" type="checkbox"/> Other Convert to SWD; Admin Order SWD-1135		7 Lease Name and Unit Agreement Name Federal T 1	
b Type of Completion <input type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input checked="" type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr., <input type="checkbox"/> Other		8. Well No.	
2 Name of Operator DEVON ENERGY PRODUCTION COMPANY, LP		9 Pool name or Wildcat L. Wolfcamp and Cisco	
3 Address of Operator 20 North Broadway, Oklahoma City, OK 73102		96/36	
4 Well Location Unit Letter A 660' feet from the NORTH line and 990' feet from the EAST line Section 12 Township 18S Range 27E NMPM County Eddy			
10. Date Spudded 6/28/1990	11. Date T.D. Reached 8/25/1990	12 Date Completed Orig 9/13/90 SWD 9/15/08	13 Elevations (DR, RKB, RT, GL)* 3634' KB; 3618' GL
15. Total Depth MD 10,141	16 Plug Back T.D. 9005'	17 If Multiple Compl How Many Zones No	18. Intervals Drilled BY X
19 Producing Intervals(s), of this completion - Top, Bottom, Name L. Wolfcamp; 6,868' - 7,360' and Cisco; 7,758' - 8,060' (Salt Water Disposal Only)			20 Was Directional Survey Made No
21. Type Electric and Other Logs Run DDL-MGRD, SDL-DSN (original logs)			22 Was Well Cored No

23 CASING RECORD (Report all strings set in well)					
Casing Size	Weight LB / FT.	Depth Set	Hole Size	Cementing Record	Amount Pulled
13-3/8"	68#	472'	17-1/2"	450 sx	
8-5/8"	32#	2589'	12 1/4"	900 sx	
5-1/2"	17#	9473'	7-7/8"	430 sx	

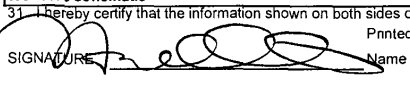
24 Liner Record				25 Tubing Record		
Size	Top	Bottom	Sacks Cement	Size	Depth Set	Packer Set
4"	9055'	10141'	80 sx	3-1/2" (IPC)	6789'	6789'

26 Perforation record (interval, size, and number)		27. Acid, Shot, Fracture, Cement, Squeeze, ETC.	
Depth Interval		Amount and Kind Material Used	
7893'-8060'		Frac--5040 gals 15% HCl acid and 120,372 gals Spectra Star 2500 + 167,552 # 100% White 20/40 Sand.	
7758'-7840'		Frac--4500 gals 15% Spearhead acid and 119,255 gals Spectra Star 2500 + 106,750 # 100% White 20/40 Sand.	

28 PRODUCTION							
Date First Production NA		Production Method (Flowing, Gas lift, pumping - Size and type pump)				Well Status (Prod Or Shut-In) 9/16/08-Converted to SWD	
Date of Test	Hours Tested	Choke Size	Prod'n For Test	Oil - Bbl	Gas - MCF	Water - Bbl	Gas - Oil Ratio
	24		Period				#DIV/0!
Flowing Tubing Press	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl	Gas - MCF	Water - Bbl	Oil Gravity - API (Corr)	
29. Disposition of Gas (Sold, used for fuel, vented, etc)						Test Witnessed By	
NA--Converted to SWD 9/16/08							
30. List Attachments							
Wellbore schematic							

31. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief

Printed Name **Norvella Adams** Title **Sr Staff Engineering Technician** DATE **9/17/2008**

SIGNATURE  E-mail Address **norvella.adams@dvn.com**

Accepted for record
 NMOCD

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTOCT 06 2008
OCD-ARTESIAFORM APPROVED
OMB NO. 1004-0137
EXPIRES: March 31, 2007

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input checked="" type="checkbox"/> Other SWD- Order 1135		5. Lease Serial No NM-42410							
b. Type of Completion <input type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input checked="" type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resrv., <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name							
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY, LP		7. Unit or CA Agreement Name and No							
3. Address 20 North Broadway Oklahoma City, OK 73102-8260		8. Lease Name and Well No Federal T 1							
3a. Phone No (include area code) 405-552-8198		9. API Well No. 30-015-26404 0052							
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At Surface 660 FNL 990 FEL At top prod. Interval reported below At total Depth		10. Field and Pool, or Exploratory L. Wolfcamp and Cisco 96136 11. Sec, T, R, M, on Block and Survey or Area 12 18S 27E 12. County or Parish Eddy 13. State NM							
14. Date Spudded 6/28/1990	15. Date T D Reached 8/25/1990	16. Date Completed 9/15/08 - SWD 9/13/90 orig compl <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod.	17. Elevations (DR, RKB, RT, GL)* 3634' KB; 3618' GL						
18. Total Depth: MD TVD 7600'	19. Plug Back T D . MD TVI 6142'	20. Depth Bridge Plug Set: MD TVI 6177							
21. Type Electric & Other Mechanical Logs Run (Submit copy of each)		22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit report) Directional Survey? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit copy)							
DLL-MGRD, SDL_DSN (original logs)									
23. Casing and Liner Record (Report all strings set in well)									
Hole Size	Size/Grade	Wt (#/ft)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks & Type Cement	Slurry Vol (BBL)	Cement Top*	Amount Pulled
17-1/2"	13-3/8"/LT&C	68		472'		450 Sx		Surf	
12 1/4"	8-5/8"/J55	32		2589'		900 Sx		Surf	
7-7/8"	5-1/2"/LT&C	17		9473'		430 Sx		Surf	
4 3/4"	4" / L80	10.46		10,141'		80 Sx		9055'	
24. Tubing Record									
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	
3 1/2" IPC	6789'	6789'							
25. Producing Intervals									
Formation		Top	Bottom	Perforation Record		Size	No. Holes	Perf Status	
Wolfcamp		6868'	7360'	6868'-7360'			140	Open for SWD	
Cisco		7893'	7840'	7893'-7840'			228	Open for SWD	
Morrow		10,008'	10,054'	10,008'-10,054'				Abandoned	
26. Perforation Record									
27. Acid, Fracture, Treatment, Cement Squeeze, Etc.									
Depth Interval		Amount and Type of Material							
7893-8060'		Frac - 5040 gals 15% HCl acid and 120,372 gals Spectra Star 2500 + 167,552 # 100% White 20/40 sand.							
7758-7840'		Frac - 4500 gals 15% Spearhead acid and 119,255 gals Spectra Star 2500 + 106,750 # 100% White 20/40 sand.							
28. Production - Interval A									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
NA		24	→						
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status	
			→				#DIV/0!		
28a. Production - Interval B									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
DAVID R. GLASS PETROLEUM ENGINEER									

Choke Size	Ibg. Press. Flwg SI	Csg. Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status
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(See instructions and spaces for additional data on reverse side)

28b Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Ibg. Press. Flwg SI	Csg. Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	

28c Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Ibg. Press. Flwg SI	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	

(See instructions and spaces for additional data on reverse side)

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

30 Summary of Porous Zones (Include Aquifers).

Show all important zones of porosity and contents thereof, Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31 Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc	Name	Top Meas Depth
				Yates	476'
				Queen	1218'
				Grayburg	1572'
				San Andres	2072'
				Tubb	4824'
				Abo	6016'
				Wolfcamp	7682'
				Cisco	8912'
				Strawn	9513'
				Atoka	9628'
				Morrow	9828'
				Morrow Clastics	9965'
				Lower Morrow	10104'

32. Additional remarks (include plugging procedure).

33 Indicate which items have been attached by placing a check in the appropriate box

- ☐ Electrical/Mechanical Logs (1 full set req'd)
 ☐ Geologic Report
 ☐ DST Report
 ☐ Directional Survey
 ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☒ Other Wellbore Schematic

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (Please print) Norvella Adams

Title Sr. Staff Engineering Technician

Signature [Signature]

Date 9/17/2008

Title 18 U.S.C. Section 1001 and Title 49 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.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SUNDRY NOTICES AND REPORTS ON WELLS

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

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

SUBMIT IN TRIPLICATE - Other instructions on page 2

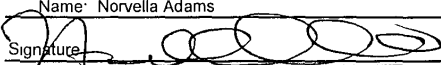
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other SWD conversion. Admin Order SWD-1135		5. Lease Serial No NM-42410
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY, LP		6. If Indian, Allottee or Tribe Name
3a. Address 20 North Broadway, Oklahoma City, OK 73102		7. Unit or CA Agreement Name and No.
3b. Phone No. (include area code) 405-552-8198		8. Well Name and No Federal T 1
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 660 FNL 990 FEL A 12 18S 27E		9. API Well No 30-015-26404
		10. Field and Pool, or Exploratory Area L. Wolfcamp and Cisco
		11. County or Parish, State Eddy NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input checked="" type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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

Converted to SWD. Administrative Order SWD-1135
8/04/08 RU unit. ND wellhead and NU BOP. TIH with bit and drill collars.
8/05/08 Drill CIBP at 6800' and 7078'.
8/06/08 Drilled through cement at 7525', CIBP at 7300' and cement at 7560' and CIBP at 7595'.
8/07/08 Ran step rate test; pumped 50 bbls at 1/2 bbl/min - 0# psi, pumped 50 bbls at 1 bbl/min -20# psi, pumped 50 bbls at 2 bbls/min - 75# psi, pumped 50 bbls at 3 bbls/min - 170# psi, pumped 50 bbls at 4 bbls/min - 250 psi.
8/08/08 Trucked in and established injection in the Wolfcamp at 150 BWPD at 170 psi.
8/11/08 Drilled cement retainers at 7745', and 7780'.
8/12/08 Drilled cement retainer at 7820' and 8000'. Circulate hole and TOH with tubing and bit.
8/13/08 Perforate Cisco from 7893' - 8060', total 140 holes. TIH and set packer at 7688'. Frac with 5,040 gals 15% HCl + 120,372 gals Spectra Star 2500 + 167,552 # 20/40 White sand.
8/14/08 TIH with retrievable tool and latch onto packer. Release packer and TOOH with packer and tubing. RU wireline and perforate Cisco from 7758'-7840'; 228 total holes
8/15/08 TIH with packer and set at 7582'. NU frac valve.
8/16/08 Frac 7758'-8060' with 4500 gals 15% Spearhead acid + 119,255 gals Spectra 2500 + 106,750 # 20/40 100% White sand. RD.
8/18/08 Release packer. TOOH with packer and tubing
8/20/08 TIH with bailer and bailed sand. Bailed sand to 8460'. TOOH with tubing. ND BOP and NU flange. Waiting on tubing.
9/15/08 TIH with packer and tubing. Set packer at 6789'. ND BOP and NU tree. Ran MIT test to 500 # for 30 minutes - ok, notified Mike Bratcher with OCD
TOOH with tubing. RIH with 3 1/2" IPC tubing and set at 6789'. Injection line installation in progress.

14. I hereby certify that the foregoing is true and correct	
Name: Norvella Adams	Title: Sr. Staff Engineering Technician
Signature: 	Date: 9/17/2008

APPROVED FOR RECORDS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved by: /S/ DAVID R. GLASS	Date:
SEP 29 2008	Accepted for record NMOC
Conditions of approval, if any are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office:

DEVON ENERGY PRODUCTION COMPANY LP

Well Name: FEDERAL T #1		Field: NORTH ILLINOIS CAMP MORROW	
Location: 660' FNL & 990' FEL; SEC 12-T18S-R27E		County: EDDY	State: NM
Elevation: 3634' KB; 3618' GL		Spud Date: 6/28/90	Compl Date: 9/13/90
API#: 30-015-26404	Prepared by: Norvella Adams	Date: 9/17/08	Rev:

**Current Schematic
L. Wolfcamp and Cisco SWD**

17-1/2" Hole
13-3/8", 68#, LTC, @ 472'
Cmt'd w/450 Sx. Circ to surface

12-1/4" Hole
8-5/8", J55, 32#, STC, @ 2,589'
Cmt'd w/900 Sx. Circ to surface

WOLFCAMP (8/21/93)
6,868' - 7,038'

WOLFCAMP (8/18/93)
7,092' - 7,097'; 7,120' - 7,146'

WOLFCAMP (8/16/93)
7,330' - 7,340'; 7,350' - 7,360'

SWD Perforations:
CISCO (8/1/93)
7,685' - 7,695'

CISCO (7/30/93)
7,760' - 7,768'

CISCO (7/28/93)
7,790' - 7,798'

CISCO (7/25/93)
7,932' - 7,940'

CISCO (7/22/93)
8,034' - 8,042'
8,055' - 8,060'

4" Liner top @ 9,055'

7-7/8" Hole
5-1/2", N80, 17#, LTC, @ 9,473'
Cmt'd w/430 Sx

MORROW (9/14/90)
10,008' - 10,014'
10,038' - 10,054'

4-3/4" Hole
4" 10.46#, L80 Liner @ 9,055' - 10,141'
Cmt'd w/80 Sx

Formation Tops

Morrow 9,600-10,250'
Atoka 9,230' - 9,700'
Upper Wolfcamp 6,400' - 7,200'
Abo 5,600' - 6,200'
Yeso 3,300' - 3,900'
San Andres 2,000' - 2,800'
Queen 1,450' - 1,650'

3-1/2", 9.3 #, N80, Injection tubing @ 6789'

5-1/2" IPC Packer @ 6,789'

Frac 7758'-7840' with 4500 gals 15% Spearhead acid and 119,255 gals Spectra Star 2500 + 106,750 # 100% 20/40 White sand.

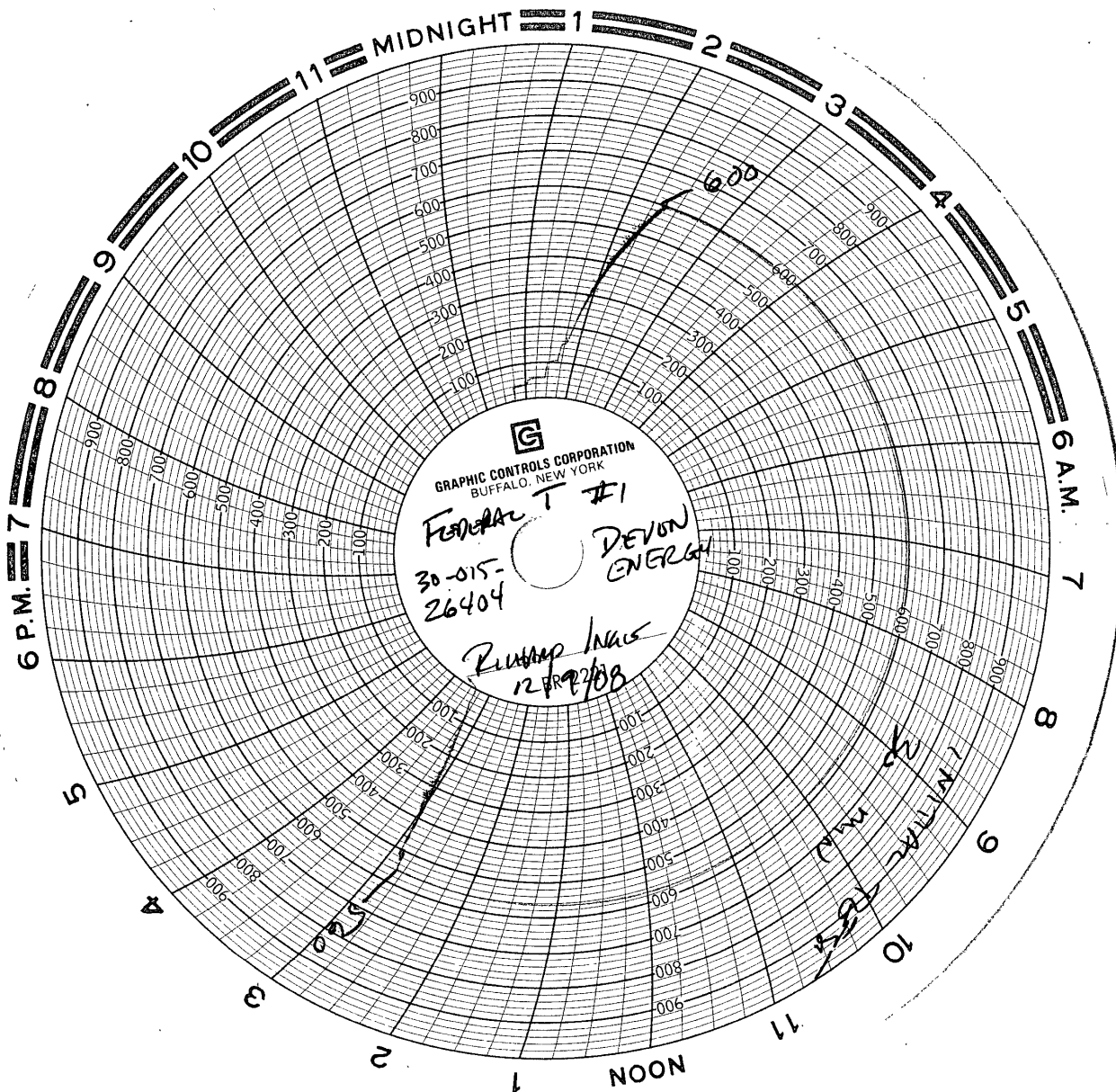
Frac 7893'-8060' with 5040 gals 15% HCl acid and 120,372 gals Spectra Star 2500 + 167,552 # 100% 20/40 White sand.

35' cement. 9,005' PBD
CIBP @ 9,040' (7/21/93)

CIBP @ 9,950' (7/19/93)

10,100' PBD

10,141' TD



District II
1301 W. Grand Ave., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

State of New Mexico
Energy, Minerals and Natural
Resources

Form C-145
Permit 124456

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

Change of Operator

Previous Operator Information

OGRID: 6137
Name: DEVON ENERGY PRODUCTION
COMPANY, LP
Address: 20 N Broadway
City, State, Zip: Oklahoma City, OK 73102

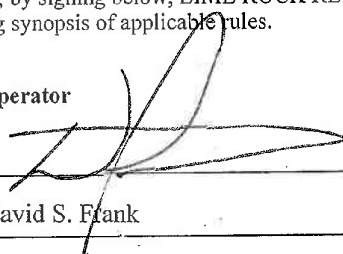
New Operator Information

Effective Date: Effective on the date of approval by the OCD
OGRID: 277558
Name: LIME ROCK RESOURCES II-A, L.P.
Address: 1111 Bagby Street
Suite 4600
City, State, Zip: Houston, TX 77002


I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the certified list of wells is true to the best of my knowledge and belief.

Additionally, by signing below, LIME ROCK RESOURCES II-A, L.P. certifies that it has read and understands the following synopsis of applicable rules.

Previous Operator

Signature: 
Printed Name: David S. Frank
Title: David S. Frank – Attorney-in-Fact
Date: 12/09/2010 Phone: (405)-552-7881

New Operator

Signature: 
Printed Name: C. Tim Miller
Title: Chief Operating Officer
Date: 12/17/10 Phone: 713 292 9514

NMOCD Approval

Lime Rock Resources II-A, L.P. assumes operations of the distressed list effective 12/09/2010.
Electronic Signature: Randy Dade
Date: December 27, 2010

LIME ROCK RESOURCES II-A, L.P. certifies that all below-grade tanks constructed and installed prior to June 16, 2008 associated with the selected wells are in compliance with 19.15.17 NMAC, have been closed pursuant to 19.15.17.13 NMAC, or have been retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.

LIME ROCK RESOURCES II-A, L.P. understands that the OCD's approval of this operator change:

1. constitutes approval of the transfer of the permit for any permitted pit, below-grade tank or closed-loop system associated with the selected wells; and
2. constitutes approval of the transfer of any below-grade tanks constructed and installed prior to June 16, 2008 associated with the selected wells, regardless of whether the transferor has disclosed the existence of those below-grade tanks to the transferee or to the OCD, and regardless of whether the below-grade tanks are in compliance with 19.15.17 NMAC.

As the operator of record of wells in New Mexico, LIME ROCK RESOURCES II-A, L.P. agrees to the following statements:

1. I am responsible for ensuring that the wells and related facilities comply with applicable statutes and rules, and am responsible for all regulatory filings with the OCD. I am responsible for knowing all applicable statutes and rules, not just the rules referenced in this list. I understand that the OCD's rules are available on the OCD website under "Rules," and that the Water Quality Control Commission rules are available on the OCD website on the "Publications" page.
2. I understand that if I acquire wells from another operator, the OCD must approve the operator change before I begin operating those wells. See 19.15.9.9.B NMAC. I understand that if I acquire wells or facilities subject to a compliance order addressing inactive wells or environmental cleanup, before the OCD will approve the operator change it may require me to enter into an enforceable agreement to return those wells to compliance. See 19.15.9.9.C(2) NMAC.
3. I must file a monthly C-115 report showing production for each non-plugged well completion for which the OCD has approved an allowable and authorization to transport, and injection for each injection well. See 19.15.7.24 NMAC. I understand that the OCD may cancel my authority to transport from or inject into all the wells I operate if I fail to file C-115 reports. See 19.15.7.24.C NMAC.
4. I understand that New Mexico requires wells that have been inactive for certain time periods to be plugged or placed on approved temporary abandonment. See 19.15.25.8 NMAC. I understand the requirements for plugging and approved temporary abandonment in 19.15.25 NMAC. I understand that I can check my compliance with the basic requirements of 19.15.25.8 NMAC by using the "Inactive Well List" on OCD's website.
5. I must keep current with financial assurances for well plugging. I understand that New Mexico requires each state or fee well that has been inactive for more than two years and has not been plugged and released to be covered by a single-well financial assurance, even if the well is also covered by a blanket financial assurance and even if the well is on approved temporary abandonment status. See 19.15.8.9.C NMAC. I understand that I can check my compliance with the single-well financial assurance requirement by using the "Inactive Well Additional Financial Assurance Report" on the OCD's website.
6. I am responsible for reporting releases as defined by 19.15.29 NMAC. I understand the OCD will look to me as the operator of record to take corrective action for releases at my wells and related facilities, including releases that occurred before I became operator of record.
7. I have read 19.15.5.9 NMAC, commonly known as "Part 5.9," and understand that to be in compliance with its requirements I must have the appropriate financial assurances in place, comply with orders requiring corrective action, pay penalties assessed by the courts or agreed to by me in a settlement agreement, and not have too many wells out of compliance with the inactive well rule (19.15.25.8 NMAC). 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.

SUBSURFACE

NAVAJO REFINING COMPANY

Map ID No. 11

Artificial Penetration Review

OPERATOR Navajo Refining Co.

LEASE WDW

WELL NUMBER 2

DRILLED 5-05-99

PLUGGED NA

STATUS Active Injection

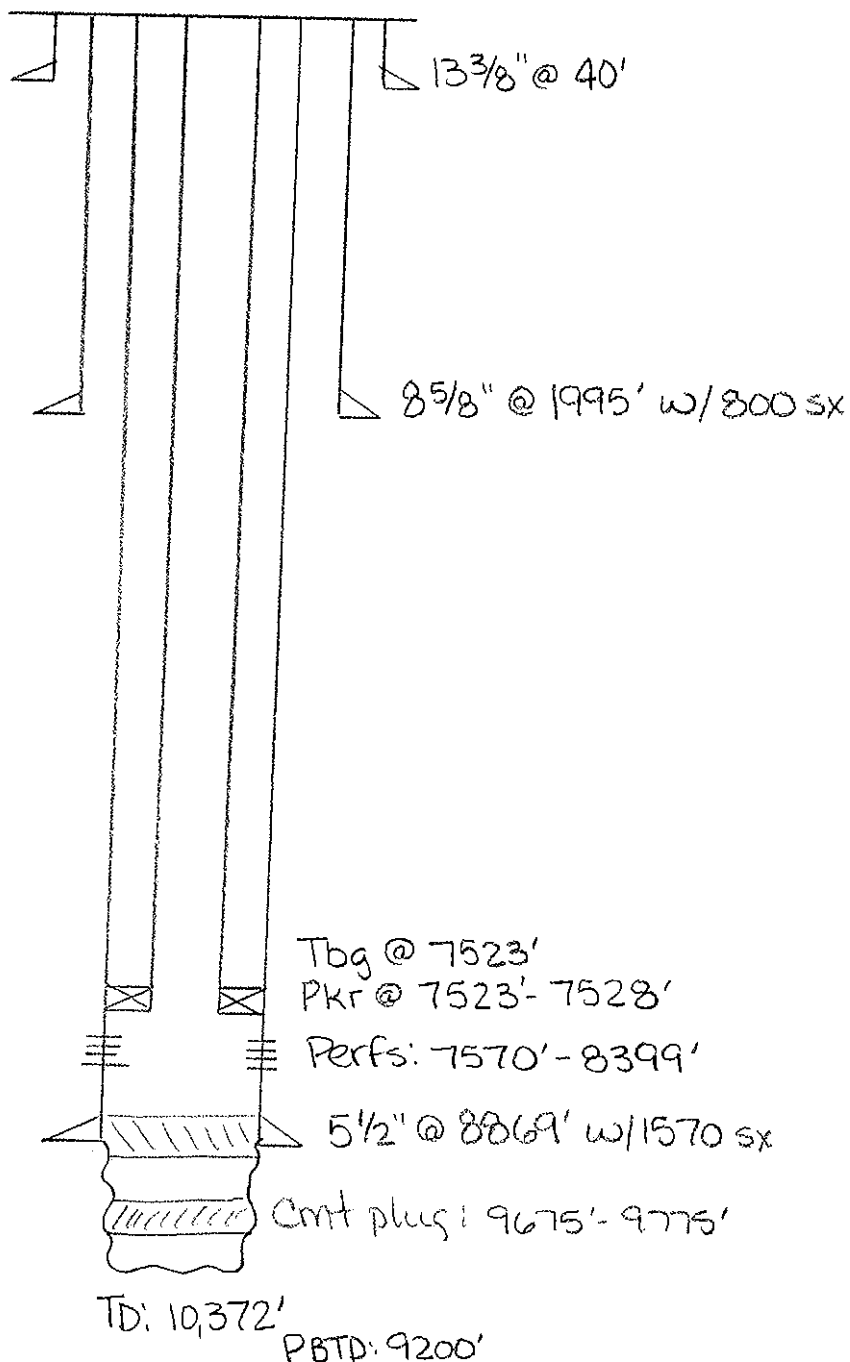
LOCATION Sec. 12 -T18S-R27E

MUD FILLED BOREHOLE NA

TOP OF INJECTION ZONE 7270'

API NO. 30-015-20894

REMARKS: Top of Cement behind 5 1/2" @ surface



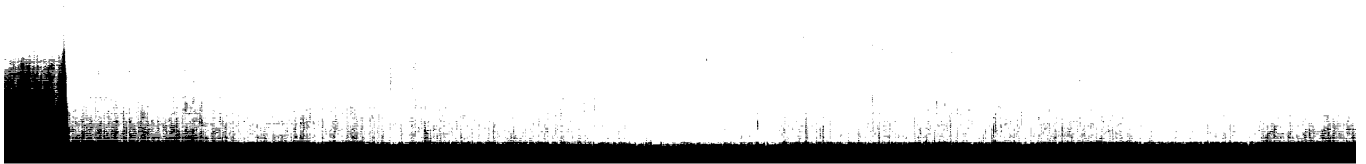
50-015-2089

DAVID 15694

PROP 23592

POOL 96918

Navajo (Injecting) Permian-Penn





Oxford

STOCK No. 773 1/2

MADE IN U. S. A.

9-26-85

COMPENSATED NEUTRON
GAMMA RAY

SURF-1768

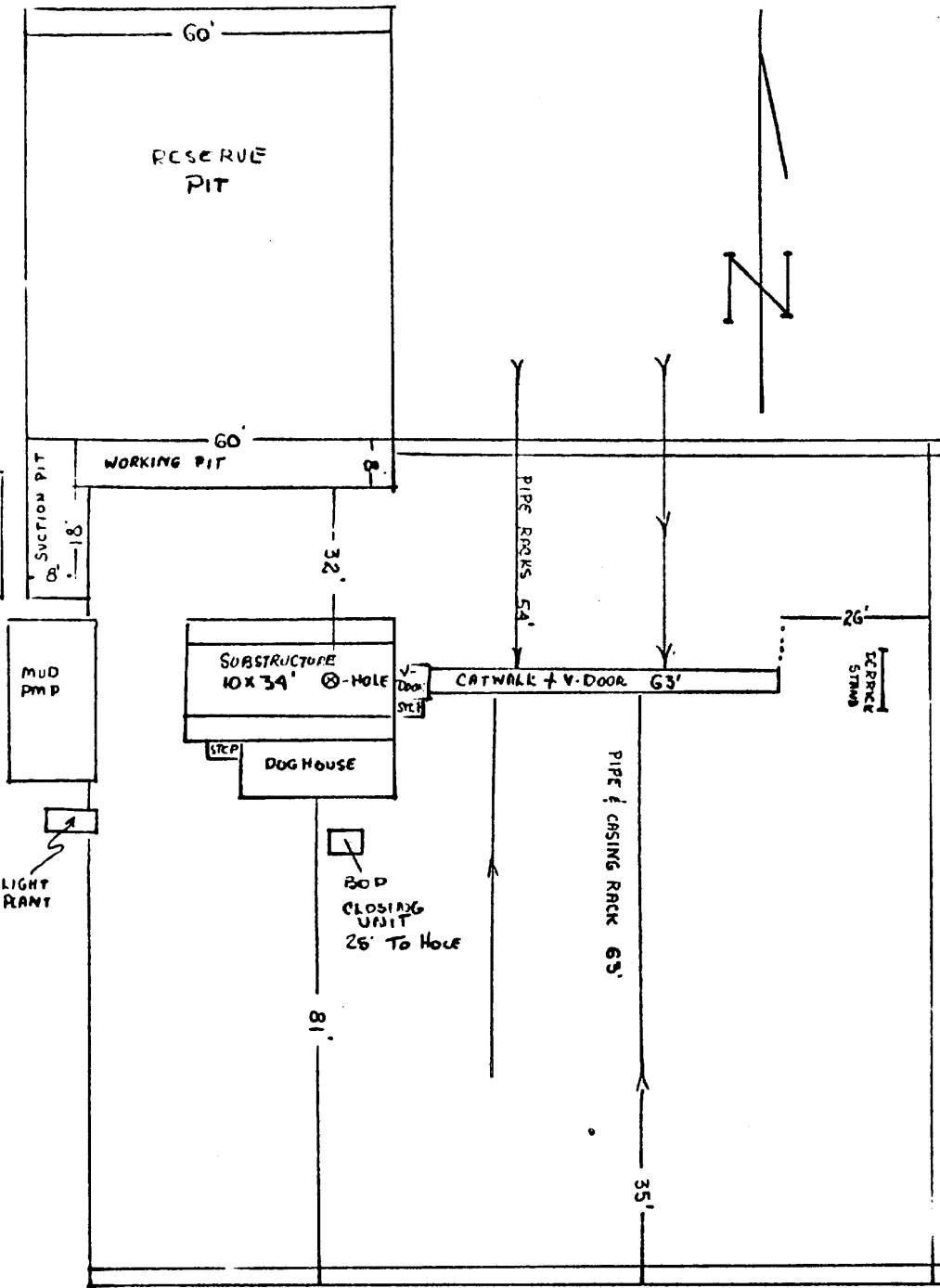
5-13-99

MSG GAMMA COLLAR
CBL LOG

SURF-1910'

8127

WATER
TANK
12' X 20'



Amoco Production Company

SCALE:

GENERAL RIG LAYOUT

DRG.
NO.

1. Existing Wells - This Plat
2. Planned Access Roads - This plat
3. Location of Wells - This Plat
4. Lateral Roads to well location - this Plat
5. Location of Tank Battery & Flow Lines - To be at well loc.
6. Location & types of Water - To be trucked
7. Methods for Handling Waste Disposal - In suitable containers and pits on location.
8. Camps - None
9. Air Strips - None
10. Pig layout - See Attached
11. Make location cleanup in accordance with good operating practice and if P&A clean & level location around well.
12. None
13. There are no houses, buildings, and windmills within 1/4 mile of the location

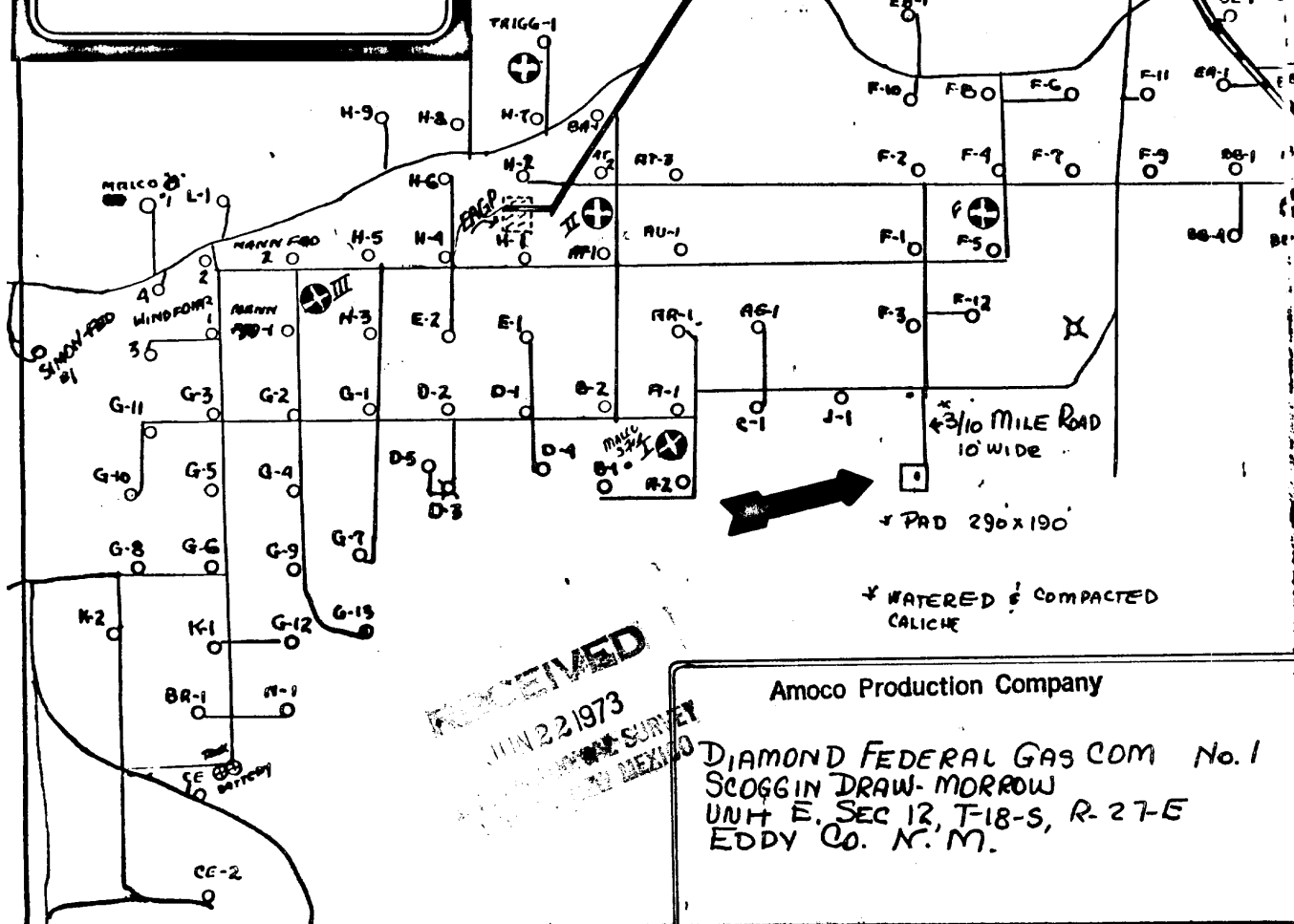
NM 9 MI

POWER STATION

ST H'WAY

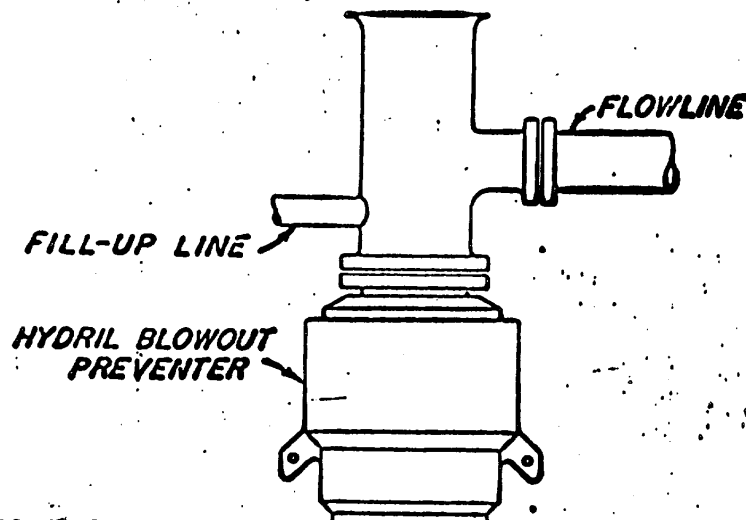
1.7

8



BLOWOUT PREVENTER HOOK-UP FOR DRILLING BELOW INTERMEDIATE CASING

1. BLOWOUT PREVENTERS AND MASTER VALVE TO BE FLUID OPERATED AND ALL FITTINGS MUST BE IN GOOD CONDITION (MINIMUM: WP - 3000 PSI, TEST - 6000 PSI).
2. EQUIPMENT THROUGH WHICH BIT MUST PASS SHALL BE AS LARGE AS THE INSIDE DIAMETER OF CASING THAT IS BEING DRILLED THROUGH.
3. KELLY COCK REQUIRED (MINIMUM: 3000 PSI WP, 6000 PSI TEST)
4. OMSCO OR COMPARABLE SAFETY VALVE MUST BE AVAILABLE ON RIG FLOOR AT ALL TIMES WITH PROPER CONNECTION OR SUB. (MINIMUM: 3000 PSI WP, 6000 PSI TEST)



BLOWOUT PREVENTER

WESTERN OIL AND GAS ACREAGE DEDICATION STATE

AMOCO PRODUCTION COMPANY

DIAMOND *Federal Gas Com*

1

12

18 SOUTH

27 EAST

EDDY

1980

NORTH

660

WEST

3606.9'

MORROW

SCOGGIN DRAW MORROW (F&A)

320

1. Within the acreage dedicated to the subject well, two shaded pencil or hatchure marks on the plat being

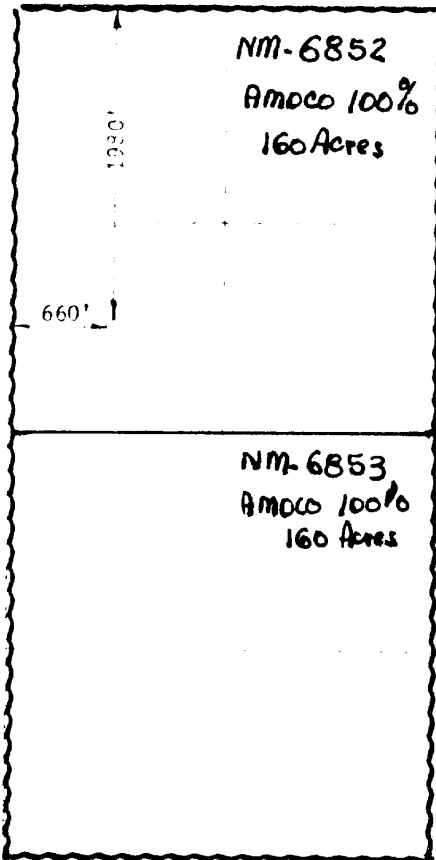
2. If more than one acreage is dedicated to the well, outline each and identify the ownership thereof (the owner's name, interest and address).

3. If more than one acreage of different ownership is dedicated to the well, have the interests of all owners been consolidated for unitization, unitization, lease pooling, etc?

4. Yes ☐ No ☐ If answer is "Yes," type of consolidation

5. List the owners and tract descriptions which have actually been consolidated. If so, the acreage of each tract of land is

6. If the state will be utilized to the well until all interests have been consolidated, the consolidation of interests is hereby being made for unitization, unitization, lease pooling, etc. until a non-standard well eliminating such interests has been approved by the state.



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

J. E. York
AREA ENGINEER

Amoco Production Company

JUN 21 1973


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

JUNE 20, 1973

John W. West

drilling into the Wolfcamp formation
and used until production casing is run and cemented. Monitoring
equipment shall consist of the following:

- (1) A recording pit level indicator to determine pit volume gains and losses.
 - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
 - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
6. When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 150 feet. The volume of mud required to fill the hole shall be watched, and any time there is an indication of swabbing, or influx of formation fluids, proper blowout prevention precautions must be taken. The mud shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running the pipe to bottom.
7. A copy of these requirements shall be posted on the rig floor or in the dog house during the drilling of the well.


James A. Knauf
District Engineer

Lease No. NM-6852
Well Amoco Production Co. 1-Diamond Federal Gas Com.
Drillsite 1980/N 66G/W 12-18S-27E
Depth 10,000' Morrow
Approved July 6, 1973



United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Drawer U
Artesia, New Mexico 88210

June 22, 1973

NOTICE

DRILLING WELL CONTROL REQUIREMENTS FOR DEEP WELLS DRILLED ON FEDERAL OIL AND GAS LEASES IN THE ARTESIA DISTRICT

The following requirements are established in accordance with 30 CFR 221.24, 221.36, and 221.37. Blowout preventer equipment, choke equipment, drilling fluid characteristics, drilling fluid monitors, and the conduct of drilling procedures shall be such as are necessary to prevent the blowout of any well. In addition to all other applicable rules, regulations, and accepted good operating practices, drilling shall be in accordance with the following safety requirements:

1. After setting the 8-5/8 inch casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report. In addition, the pipe rams and bag-type preventer shall be actuated at least once each 24 hours and the blind rams each time the drill pipe is out of the hole.
2. Accumulators shall maintain a pressure capacity reserve at all times to provide for repeated operation of hydraulic preventers.
3. A drill string safety valve in the open position shall be maintained on the rig floor at all times while drilling operations are being conducted.
4. Blowout prevention drills shall be conducted as necessary to insure that each drilling crew is properly trained to carry out emergency duties.
5. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-015-20894

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER

RECEIVED

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Amoco Production Company

JUL 9 1973

3. ADDRESS OF OPERATOR

BOX 68, HOBBS, N. M. 88240

4. LOCATION OF WELL (Report location clearly and in accordance with State requirements.)

At surface

ARTESIA, OFFICE

1980' FNLy 660' FNL Sec. 12 (Unit E, SE 1/4 NW 1/4)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

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

3607' GL

16. NO. OF ACRES IN LEASE

19. PROPOSED DEPTH

10,000

17. NO. OF ACRES ASSIGNED TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

ROTARY

22. APPROX. DATE WORK WILL START*

7-1-73

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8 5/8"	32.24#	1000'	Arc.
7 7/8"	4 1/2"	9.5-11.6"	10000'	SUFFICIENT TO FILL 500' ABOVE UPPERMOST PAY.

After drilling well logs will be run and evaluations made, perforating and/or stimulating as necessary in attempting commercial production.

BOP program attached.

Mud Program:

0-1000' Native mud & water

1000-5000'

9000-10000' min. quality, low solids, gel for satisfactory operations & samples.

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

24.

SIGNED

J. E. York

TITLE

AREA ENGINEER

DATE

JUN 21 1973

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

JUL 6 1973

APPROVED BY

J. E. York

TITLE

DISTRICT ENGINEER

DATE

JUL 6 1973

or 5. USGS-Per

1- DIV

1- SUSP

1- PER

1- ARCO

Subject to attached "Notice" dated 6-22-73

See Instructions On Reverse Side

Copy to SF

RECEIVED

JUL 10 1973

P. O. Drawer U
Artesia, New Mexico 88210

O. C. C.
ARTESIA, OFFICE

July 9, 1973

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

Dear Mr. York:

This is to confirm my telephone conversation with you today whereby we requested that the 8-5/8-inch casing string be set in the top of the San Andres formation (approximately 2,000 feet below the surface) in your No. 1 Diamond Federal Gas Com. well on lease NM-6852 in the SW 1/4 sec. 12, T. 18 S., R. 27 E., N.M.P.M., Eddy County, New Mexico.

Sincerely yours,

(Signature) JAMES A. KNAUF

James A. Knauf
District Engineer

cc:
Roswell
N.M.O.C.C. (2) ✓

RECEIVED

JUL 10 1973

O. C. C.
ARTESIA, OFFICE

1. The first part of the paper discusses the importance of the study.

2. The second part of the paper discusses the methodology used.

3. The third part of the paper discusses the results of the study.

4. The fourth part of the paper discusses the conclusions of the study.

5. The fifth part of the paper discusses the implications of the study.

6. The sixth part of the paper discusses the limitations of the study.

7. The seventh part of the paper discusses the future research.

8. The eighth part of the paper discusses the acknowledgments.

9. The ninth part of the paper discusses the references.

10. The tenth part of the paper discusses the appendices.

11. The eleventh part of the paper discusses the glossary.

12. The twelfth part of the paper discusses the index.

13. The thirteenth part of the paper discusses the bibliography.

14. The fourteenth part of the paper discusses the list of figures.

15. The fifteenth part of the paper discusses the list of tables.

16. The sixteenth part of the paper discusses the list of abbreviations.

17. The seventeenth part of the paper discusses the list of symbols.

18. The eighteenth part of the paper discusses the list of equations.

19. The nineteenth part of the paper discusses the list of formulas.

20. The twentieth part of the paper discusses the list of diagrams.

21. The twenty-first part of the paper discusses the list of figures.

22. The twenty-second part of the paper discusses the list of tables.

U.S. GEOLOGICAL SURVEY

N. M. O. C. C. COPY
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Copy 651

U.S. GEOLOGICAL SURVEY
F. S. 42 10421
5. LEASE NO. 6. TR. INDIAN ALLOT. 7. TRUE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. WELL TYPE: ☐ CAS ☐ WELL ☐ OTHER **DRILLING**
2. NAME OF OPERATOR: **Amoco Production Company**
3. ADDRESS OF OPERATOR: **BOX 68, HOBBS, N. M. 88240**
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface: **1980 FNL x 660 FWL SEC. 12 (UNIT E, SE 1/4 NW 1/4)**
14. PERMIT NO.:
15. ELEVATIONS (Show whether DF, RT, GR, etc.):
3607' GL 3623' R.D.B.

7. UNIT AGREEMENT NAME: **DIAMOND FED. GAS CDM**
8. FARM OR LEASE NAME:
9. WELL NO.: **1**
10. FIELD AND POOL, OR WILDCAT: **SCOGGIN DRAW-NORROW**
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: **12-18-27-NM PM**
12. COUNTY OR PARISH: **EDDY** 13. STATE: **N.M.**

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	MULTIPLE COMPLETE	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	ABANDON*	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
(Other)	<input type="checkbox"/>		
		WATER SHUT-OFF	<input checked="" type="checkbox"/>
		FRACTURE TREATMENT	<input type="checkbox"/>
		SHOOTING OR ACIDIZING	<input type="checkbox"/>
		(Other) Spudding	<input checked="" type="checkbox"/>

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

*Delta Drilling Co. spudded 11" hole 3: PM 7-18-73.
On 7-22-73, 8 7/8" OD 32" BR K-55 Casing was set
@ 1955 w/ 7005x Incon 2% Gel + 100 psi meat. Circ. 200 G.
After WOT 18 hours, tested casing w/ 500 psi for 30 min.
Test O.K.
Reduced hole to 7 7/8" @ 1955 and resumed drilling.*

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JUL 24 1973
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

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

SIGNED: *[Signature]* TITLE: **ADMINISTRATIVE ASSISTANT** DATE: **JUL 23 1973**

(This space for Federal or State office use)

APPROVED: **APPROVED** TITLE: DATE:

CONDITION: APPROVED IF ANY:

04-11SGS-ABT
1- DIV
1- SUSP
1- RRV
1- ARCO

JUL 24 1973
H. L. BECKMAN
ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

RECEIVED

AUG 1 1973

Drawer 1857
Roswell, New Mexico 88201

C. D. C.
ARTESIA

July 24, 1973

Amoco Production Company
Attention: Mr. Joe W. Durkee
P. O. Box 3092
Houston, Texas 77001

Gentlemen:

Enclosed are three approved copies of communitization agreement No. Com. Agr.-SW-760 involving 320 acres of land in Federal leases New Mexico 6852 and 6853, Eddy County, New Mexico.

The agreement communitizes all rights as to dry gas and associated liquid hydrocarbons producible from the Morrow formation in the W $\frac{1}{2}$ 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:
BIM, Santa Fe (w/cy agr.)
Artesia (w/cy agr.)
Rondeau

JMonro:lh

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JUL 26 1973

U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

N. M. D. C. C. COREY

Copy 65F

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other _____
1b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESRV. ☐ Other _____

2. NAME OF OPERATOR

Amoco Production Company ✓

SEP 24 1973

3. ADDRESS OF OPERATOR

BOX 68, HOBBS, N. M. 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

At surface

1980' FNLY 660' FWL Sec 12. (Unit E, SE 1/4 NW 1/4)

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SPUNDED

7-18-73

16. DATE T.D. REACHED

8-27-73

17. DATE COMPL. (Ready to prod.)

P&A

18. ELEVATIONS (OF, RKB, RT, GR, ETC.)*

3623' RDB

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD

10,372

21. PLUG, BACK T.D., MD & TVD

P&A

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY

O-TD

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

NONE

25. WAS DIRECTIONAL SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

GR-N - DUAL IND LL

27. WAS WELL CORED

No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 7/8	32#	1955	11"	800 SX	NONE

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

30. TUBING RECORD

31. PERFORATION RECORD (Interval, size and number)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.*

PRODUCTION

DATE FIRST PRODUCTION

PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

WELL STATUS (Producing or shut-in)

DATE OF TEST

HOURS TESTED

CHOKE SIZE

PROD'N. FOR TEST PERIOD

OIL—BBL.

GAS—MCF.

FLOW. TUBING PRESS.

CASING PRESSURE

CALCULATED 24-HOUR RATE

OIL—BBL.

GAS—MCF.

WATER—BBL.

GRAVITY-API (CORR.)

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

35. LIST OF ATTACHMENTS

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

SIGNED

Ray L. Yakum

TITLE ADMINISTRATIVE ASSISTANT

DATE

9-10-73

013- USGS-ART

1- W 7
1- DIV
1- RRY

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

RECEIVED

SEP 19 1973

U.S. GEOLOGICAL SURVEY
ARTESIA, N.M.

9-13-74

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

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

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. **Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF: CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH	
			No Oil or Gas	T	5 506		
				T	WOLF CAMP	6 725	
				T	Q. 1500	7 485	
				T	STRAWN	8 820	
				T	ATOKA	9 460	
				T	MORROW	9 725	
				T	CHESTER	10 158	
				Miss Lm	10 338		

N. M. D. C. C. COPY
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved by the Secretary of the Interior, Department of the Interior, Washington, D.C. 20540.
 5. LEASE DESIGNATION (If not, state name)
NM-6602
 6. IF INDIAN, ALLOT. (If not, state name)

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. ☐ CAS WELL ☐ OTHER **DRILLING- DRY HOLE**

2. NAME OF OPERATOR
Amoco Production Company

3. ADDRESS OF OPERATOR
BOX 68, HOBBS, N. M. 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
 At surface
1980' FNL x 660' FWL Sec. 12 (Unit E, SE 1/4 NW 1/4)

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, OR, etc.)
3623 R.D.B.

7. UNIT AND WELL NO.
DIAMOND FELLOWSHIP

8. FARM OR RANCH NO.

9. WELL NO.

10. FIELD AND POOL OF INTEREST
SCOGGIN DRAIN MURROW

11. SEC., T., R., M., OR LER. AND SURVEY OR AREA
12-18-22 N.M.P.M.

12. COUNTY OR PARISH 13. STATE
EDDY N.M.

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

NOTICE OF INTENTION TO:

<input type="checkbox"/> TEST WATER SHUT-OFF	<input type="checkbox"/> PULL OR ALTER CASING
<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> MULTIPLE COMPLETE
<input type="checkbox"/> SHOOT OR ACIDIZE	<input checked="" type="checkbox"/> ABANDON*
<input type="checkbox"/> REPAIR WELL	<input type="checkbox"/> CHANGE PLANS
(Other)	

SUBSEQUENT REPORT OF:

<input type="checkbox"/> WATER SHUT-OFF	<input type="checkbox"/> REPAIRING WELL
<input type="checkbox"/> FRACTURE TREATMENT	<input type="checkbox"/> ALTERING CASING
<input type="checkbox"/> SHOOTING OR ACIDIZING	<input type="checkbox"/> ABANDONMENT*
(Other)	

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

Drilled to a TD of 10,372' without encountering oil or gas. Logs and evaluations confirmed Dry Hole.
** Propose to P+ A as follows: Cement Plugs - Class H*

INTERVAL	LENGTH	FORMATION	SX CEMENT
9775-9675	100'	MORROW	45
7535-7435	100'	GISCO	50
5556-5456	100'	ABO	40
3720-3620	100'	YESO	50
2045-1945	100'	8 3/8" CSA 1995	40
Surface	10-20'	Fract P+ A marker	1054

All intervals to be filled w/ Ardy mud.
Location to be cleaned & levelled.

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ARTESIA, NEW MEXICO

* Pursuant to Mr. Leon Bukmans verbal approval 8-25-73.

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

SIGNED _____ TITLE **AREA ENGINEER** DATE **AUG 2 1973**

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL (If any):

APPROVED
SEP 11 1973
H. L. BEEKMAN
ACTING DISTRICT ENGINEER

See Instructions on Reverse Side

0 + 4 USGS-Aet
 1- DIV
 1- JGS
 1- RR
 1- Arco

UN D STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
N. M. O. C. C. CO.
SUBMIT IN TRIPI
(Other instructions
verse side)Form approved
Bureau No. 42 R1424.
5. LEASE DESIGNATION AND SERIAL NO.NM-6852
6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)1. OIL WELL ☐ GAS WELL ☐ OTHER ☐2. NAME OF OPERATOR
Amoco Production Company

SEP - 6 1974

3. ADDRESS OF OPERATOR

BOX 68, HOBBS, N. M. 88240

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

1980' FNLY 660' FWL Sec. 12 (UNIT E, SE 1/4 NW 1/4)

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, OR, etc.)

3623' R.D. B.

7. UNIT AGREEMENT NAME

DIAMOND FED. GAS CO.

8. FARM OR LEASE NAME

9. WELL NO.

10. FIELD AND TOOL, OR WILDCAT

SCOGGIN DRAW-MORROW

11. SEC., T. R., M., OR BLK. AND
SURVEY OR AREA

12-18-27 NMPM

12. COUNTY OR PARISH

13. STATE

EDDY

NM

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WALL

ALTERING CASING

ABANDONMENT*

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

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

Physical abandonment of well concluded 8-31-73.
Plugged and abandoned as follows:

Sx CEMENT	INTERVAL	LENGTH	FORMATION
45	9775 - 9765	100'	MORROW
50	7535 - 7435	100'	CIACO
40	5556 - 5456	100'	ABO
50	3720 - 3620	100'	YESO
40	2045 - 1945	878' CSA 1995 - circ.	
10	Surface & erected P.A. marker.		

all intervals filled w/ mud.
Location to be cleaned & leveled.

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

SIGNED

(This space for Federal or State office use)

TITLE ADMINISTRATIVE ASSISTANT

DATE SEP 5 1973

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

ON 4- USGS
1- Div
1- Susp
1- RRV
1- ARGO

SEP 6 1974

H. L. BEEKMAN
ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

RECEIVED
SEP - 5 1973
U.S. GEOLOGICAL SURVEY
ALBUQUERQUE, N.M.

EXHIBIT "D"
SKETCH OF WELL PAD

FRED POOL DRILLING, INC.
Well #2 Chukka Federal
SW $\frac{1}{4}$ NW $\frac{1}{4}$, Sec. 12: T-18-S, R-27-E

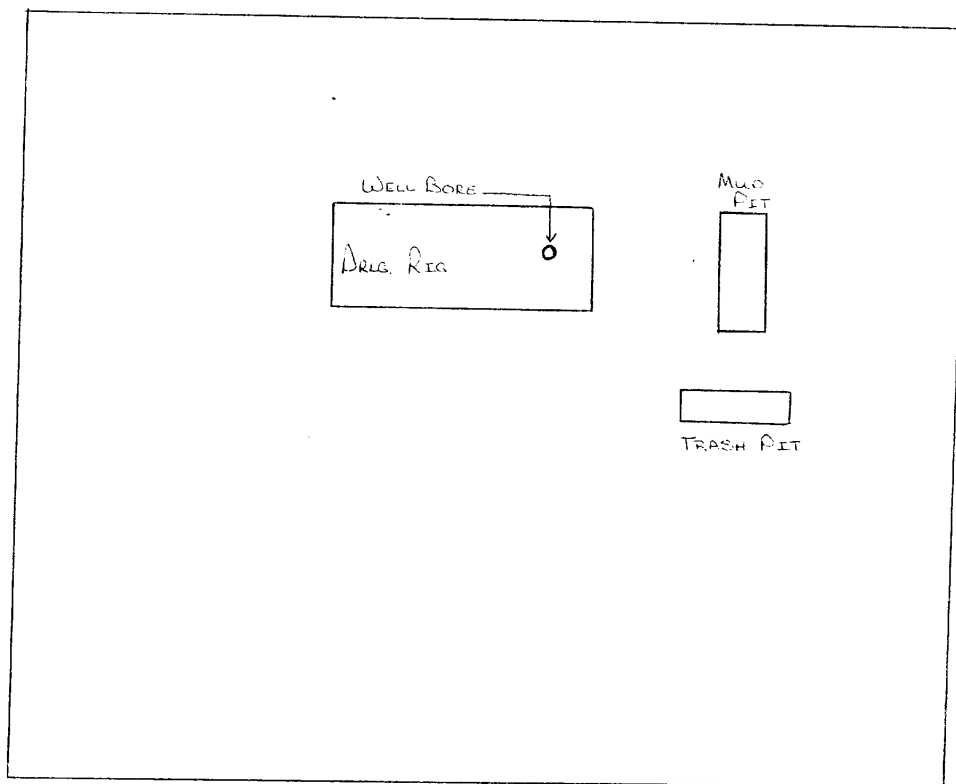
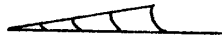
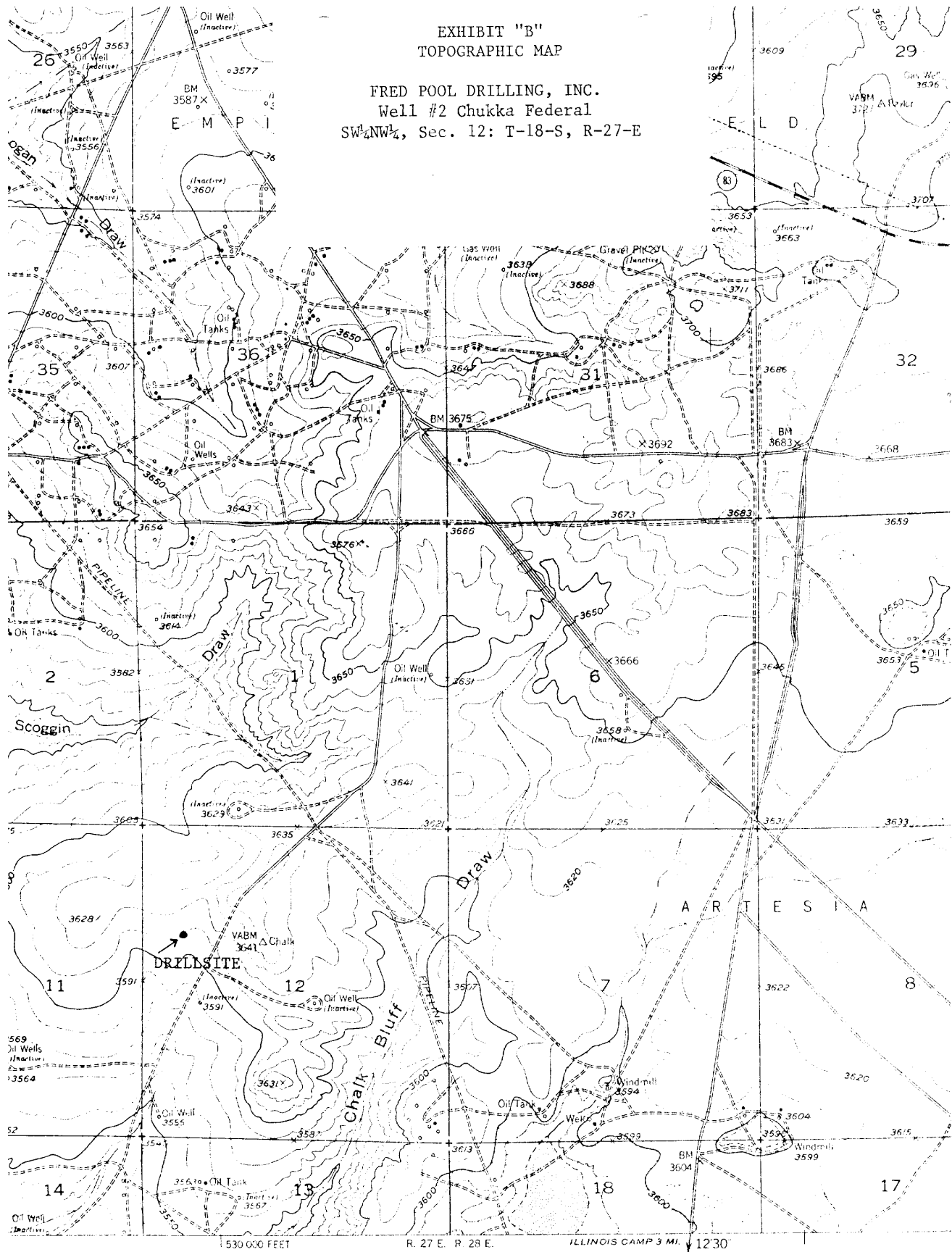


EXHIBIT "B"
TOPOGRAPHIC MAP

FRED POOL DRILLING, INC.
Well #2 Chukka Federal
SW $\frac{1}{4}$ NW $\frac{1}{4}$, Sec. 12: T-18-S, R-27-E



SUPPLEMENTAL DRILLING DATA

FRED POOL DRILLING, INC.
WELL #2 CHUKKA FEDERAL
SW $\frac{1}{4}$ NW $\frac{1}{4}$, SEC. 12, T-18-S, R-27-E
EDDY COUNTY, NEW MEXICO

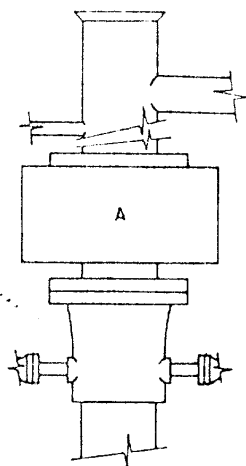
1. SURFACE FORMATION: Artesia Group of Permian Age. (Elev. 3607')
2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Yates	275'	Grayberg	1650'
Seven Rivers	475'		
Queen	1225'		
3. ANTICIPATED POROSITY ZONES:

Water	-	Above 300'
Oil	-	1500-2500'
4. CASING DESIGN:

<u>Size</u>	<u>Interval</u>	<u>Weight</u>	<u>Grade</u>	<u>Joint</u>
8 5/8"	0 - 2000'	32#		
5. SURFACE CONTROL EQUIPMENT: Control head.
6. CIRCULATING MEDIUM: KCL water.
7. AUXILIARY EQUIPMENT: None considered necessary on this shallow development well.
8. TESTING, LOGGING AND CORING PROGRAM: No coring or DST's are planned. Electric logs will include an cement bond log and a Compensated Neutron Log with Gamma Ray.
9. ABNORMAL PRESSURES, TEMPERATURES OR GASES: None anticipated.
10. ANTICIPATED STARTING DATE: It is planned that operations will commence about August 31, 1985. Duration of drilling, completion and testing operations should be one to five days.
11. RE-ENTRY DETAILS: Drill out cement plug at top of casing. Clean hole to plug at 1945' with tubing. Pressure test casing to be sure it does not leak. Run cement bond log from 1945' to surface. Perforate the Penrose section from 1450' to 1470' acidize and swab test.

BLOWOUT PREVENTER ARRANGEMENT
FRED POOL DRILLING, INC.
WELL #2 CHUKKA FEDERAL
SW $\frac{1}{4}$ NW $\frac{1}{4}$, Sec. 12, T-18-S, R-27-E
EDDY COUNTY, NEW MEXICO



ARRANGEMENT A

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

Operator Fred Pool Drilling, Inc.			Lease Chukka Federal			Well No. 2		
Unit Letter E	Section 12	Township 18-S	Range 27-E	County Eddy				
Actual Footage Location of Well:								
1980 feet from the North			line and 660			feet from the West line		
Ground Level Elev. 3607	Producing Formation			Pool Artesia			Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

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

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

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

CERTIFICATION

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

Name *Fred Pool*

Position
President

Company
Fred Pool Drilling, Inc.

Date
8-16-85

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

Date Surveyed _____

Registered Professional Engineer and/or Land Surveyor _____

Certificate No. _____

RECEIVED BY

AUG 30 1985

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WELL

a. TYPE OF WELL

OIL WELL ☒GAS WELL ☐OTHER *Re-entry*SINGLE ZONE ☒MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Fred Pool Drilling, Inc.

3. ADDRESS OF OPERATOR

P. O. Box 1393, Roswell, N.M. 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

1980' FNL & 660' FWL
At proposed prod. zone

(Unit E)

(SW $\frac{1}{4}$ NW $\frac{1}{4}$)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

11 air miles east-southeast of Artesia, N.M.

10. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drig. unit line, if any)

660'

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

1650'

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

3607 GR

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
<i>11 1/4"</i> <i>12 1/4" psc</i>	8 5/8"	32#	2000	Circ.
<i>csq. in place</i>				

This is a re-entry of Diamond Fed. Gas Com #1 plugged and abandoned 8-31-73.

OTO: 10,372

- Attached are:
- 1) Well location & acreage dedication plat
 - 2) Supplemental drilling data
 - 3) Surface use plan
 - 4) Designation of operator
 - 5) Original approved application by Amoco Production Co. for Diamond Federal Gas Com #1

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

24.

SIGNED

TITLE President

DATE 8-16-85

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

Filed 10/1
9-13-85

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN THE MANNER INDICATED
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

05F

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		RECEIVED BY SEP 11 1985 O. C. D. ARTESIA, OFFICE	5. LEASE DESIGNATION AND SERIAL NO. NM 6852
2. NAME OF OPERATOR FRED POOL DRILLING, INC.			6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR P.O. Box 1393 Roswell, N.M. 88201			7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1980 DNL 660 FWL Unit E SW 1/4 NW 1/4		8. FARM OR LEASE NAME Chukka Federal	9. WELL NO. 2
14. PERMIT NO.		15. ELEVATIONS (Show whether DF, RT, GR, etc.) 3607 GR	10. FIELD AND POOL OR WILDCAT B-G-SA Artesia Oil Pool
			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 12-T 18S- R 27E
			12. COUNTY OR PARISH Eddy
			13. STATE NM

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

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

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

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

9-5-85: Drilled cement out of surface from 0-30 ft.
Stringers of cement to 50 ft.
Tagged No. 2 plug at 1912 ft. Pulled tubing back to 1804 ft.; circulated hole with fresh water.
Preparing to log and perforate well.



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

SIGNED Santa Pool TITLE Clerk DATE 9-6-85

(This space for Federal or State office use)

APPROVED BY FOR RECORD TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY APR

SEP 10 1985

*See Instructions on Reverse Side

CAPISBAY, NEW MEXICO

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

NM OIL CONS. COM. DRAWER 1000
SEP 18 1985
ARTESIA, NM 88210

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

NM 6852

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Chukka Federal

9. WELL NO.

10. FIELD AND POOL, OR WILDCAT

Artesia Oil Pool
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec, 12-T18S-R27E

12. COUNTY OR PARISH 13. STATE

Eddy NM,

SUNDRY NOTICES AND REPORTS ON WELLS
(Do not use this form for proposals to drill or to deepen or plug back to other formations. Use "APPLICATION FOR PERMIT--" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER re-entry

2. NAME OF OPERATOR

Fred Pool Drilling, Inc.

3. ADDRESS OF OPERATOR

P.O. Box 1393 Roswell, N.M. 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)

At surface

1980 FNL 660 FWL Unit E

SW 1/4 NW 1/4

14. PERMIT NO.

3001520894

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

3607 GR

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

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

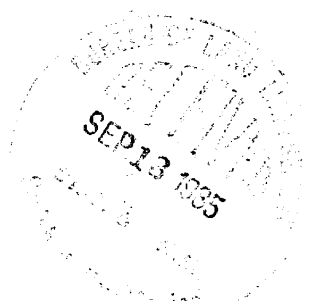
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to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

September 8, 1985

Perforations: 1446-56 ft. and 1459-62
14 shots.

Acidized with 1000 gallons NE 15%; and 30,000
gallons Versagel; 30,000# 20/40 sand and
12,000 # 10/20 sand.

Pumping well back to test.



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

SIGNED Fred Pool

TITLE Vice - president

DATE 9-11-85

(This space for Federal or State office use)

APPROVED BY ACCEPTED FOR RECORD

CONDITIONS OF APPROVAL, IF ANY

TITLE _____

DATE _____

SEP 16 1985

*See Instructions on Reverse Side

CARLSBAD, NEW MEXICO

RECEIVED BY

SEP 23 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1. WELL NAME:

ARTESIA OIL POOL

b. TYPE OF COMPLETION:

NEW
WELL ☒WORK
OVER ☐DEEP-
EN ☐PLUG
BACK ☐DIFF.
RESVR. ☐

Other

2. NAME OF OPERATOR

Fred Pool Drilling, Inc. ✓

3. ADDRESS OF OPERATOR

P.O. Box 1393 Roswell, N.M. 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface 1980 FNL660 FWL SW¼ NW¼ Unit E

At top prod. interval reported below

1446- ft.

At total depth

1912 ft.

14. PERMIT NO.

3001520894

DATE ISSUED

9-30-85

15. DATE SPUDDED

8-30-85

16. DATE T.D. REACHED

9-6-85

17. DATE COMPL. (Ready to prod.)

9-10-85

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*

3607 GR

19. ELEV. CASINGHEAD

3607 GR

20. TOTAL DEPTH, MD & TVD

1912 ft.

21. PLUG, BACK T.D., MD & TVD

1912 ft

22. IF MULTIPLE COMPL.,
HOW MANY*23. INTERVALS
DRILLED BY

ROTARY TOOLS

CABLE TOOLS

X

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

1446-1462 ft.

Penrose

25. WAS DIRECTIONAL
SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

Compensated Neutron

27. WAS WELL CORED

no

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8	32#	2000	11"	circulated	0

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	1804 ft.	

30. TUBING RECORD

31. PERFORATION RECORD (Interval, size and number)

1446-56 ft.

1459-62 ft. 14 holes

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
1446-56	1000 gal. NE 15%, 30,000
1459-62	gal. Versagel; 30,000 #
	20/40 sand; 12,000# 10/20
	sand.

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
9-12-85		Pumping				Producing	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
9-12-85	24	none	→	31	TSTM	0	
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
40#	40#	→	31	TSTM	0	35	

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

vented

TEST WITNESSED BY
SEP 19 1985 Fred Pool, Jr.

35. LIST OF ATTACHMENTS

Compensated Neutron log, mailed 9-10-85

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

SIGNED

Fred Pool

TITLE Vice President

DATE 9-13-85

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

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

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

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

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

37. SUMMARY OF POROUS ZONES: SHOW ALL INTERVALS PRODUCING, INCLUDING Cased Intervals, and All Drill-STEM Tests, Including Depth Interval Tested, Casing Used, Time Tool Open, Flowing and Shut-In Pressures, and Recoveries		38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Queen & Grayburg TD	0	65	Caliche and red bed
	65	1100	Salt, red bed and anhydrite
	1100	1365	Dolomite and anhydrite
	1365	1570	Sand dolomite
	1570	1912	dolomite

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

OIL CONSERVATION DIVISION

RECEIVED BY
SEP 18 1985
O. C. D.
ARTESIA, N.M.

REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	<input checked="" type="checkbox"/>
FILE	<input checked="" type="checkbox"/>
U.S.D.	
LAND OFFICE	
TRANSPORTER	<input checked="" type="checkbox"/>
OPERATOR	<input checked="" type="checkbox"/>
PRODUCTION OFFICE	

Fred Pool Drilling, Inc.

P.O. Box 1393 Roswell, N.M. 88201

Reason(s) for filing (Check proper box)	Other (Please explain)
New Well <input checked="" type="checkbox"/> Re-entry <input type="checkbox"/>	CASINGHEAD GAS MUST NOT BE FLARED AFTER <u>10-24-85</u> UNLESS AN EXCEPTION FROM THE B. L. M. IS OBTAINED
Recompletion <input type="checkbox"/>	
Change in Ownership <input type="checkbox"/>	

If change of ownership give name
and address of previous owner

I. DESCRIPTION OF WELL AND LEASE

Lease Name Chukka Federal	Well No. 2	Pool Name, Including Formation Artesia Oil Pool	Kind of Lease State, Federal or Fee Federal	Lease 6852
Location				
Unit Letter <u>E</u> : <u>1980</u> Feet From The <u>North</u> Line and <u>660</u> Feet From The <u>West</u>				
Line of Section <u>12-</u> Township <u>18S</u> Range <u>27E</u> , NMPM, <u>Eddy</u> Co.				

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
Navajo Crude Oil Purchasing	Box 159 Artesia, N.M. 88210
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
Phillips Petroleum	Bartlesville, Okla.
If well produces oil or liquids, give location of tanks.	Is gas actually connected? When
<u>E 12 18S 27E</u>	<u>no</u>

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

COMPLETION DATA

Designate Type of Completion - (X)	Oil Well <input checked="" type="checkbox"/>	Gas Well <input type="checkbox"/>	New Well <input type="checkbox"/>	Workover <input checked="" type="checkbox"/>	Deepen <input type="checkbox"/>	Plug Back <input type="checkbox"/>	Same Holes <input type="checkbox"/>	Diff. H. <input checked="" type="checkbox"/>
Date Spudded 8-30-85	Date Compl. Ready to Prod. 9-10-85	Total Depth 1912 ft.		P.B.T.D. 1912 ft.				
Elevations (DF, H.B., RT, GR, etc.) GR 3607	Name of Producing Formation Penrose	Top Oil/Gas Pay 1446 ft.		Tubing Depth 1804				
Perforations 1446-56 1459-62	Depth Casing Shoe -							

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE 11"	CASING & TUBING SIZE 8 5/8"	DEPTH SET 1814	SACKS CEMENT 2
------------------	--------------------------------	-------------------	-------------------

TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL

(Test must be after recovery of total volume of load oil and must be equal to or greater than top c
able for this depth or be for full 24 hours)

Date First New Oil Run To Tanks 9-12-85	Date of Test 9-12-85	Producing Method (Flow, pump, gas lift, etc.) pumping	
Length of Test 24 hrs.	Tubing Pressure 40#	Casing Pressure 40#	Choke Size none
Actual Prod. During Test 31 bbls	Oil-Bbls. 31	Water-Bbls. 0	Gas-MCF TSTM

GAS WELL

Actual Prod. Test-MCF/D TSTM	Length of Test 24hrs.	Bbls. Condensate/MMCF TSTM	Gravity of Condensate -
Testing Method (prior, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size none

CERTIFICATE OF COMPLIANCE

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

OIL CONSERVATION DIVISION

APPROVED SEP 24 1985, 19
BY Original Signed By
Les A. Clements

Pete Pool
(Signature)
Vice President
(Title)
9-16-85
(Date)

TITLE _____ Supervisor District _____

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deep well, this form must be accompanied by a tabulation of the device tests taken on the well in accordance with RULE 111.

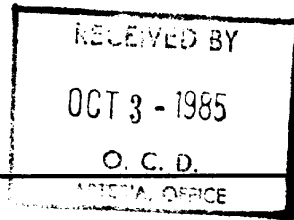
All sections of this form must be filled out completely for all wells on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multi-completed wells.

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 potentialized at 31 barrels per day of oil and gas was TSTM.

All necessary records and logs have been filed with the appropriate offices.

Sincerely,


Fred 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.

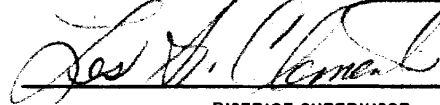
Form. - Penrose
Perfs. - 1446' - 1462'
Comp. - 9-10-85
TD - 1912'

LAC:fc

Fred Pool Drlg., Inc.

NRC
PP

OIL CONSERVATION DIVISION



DISTRICT SUPERVISOR

1

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instruct. on reverse side)

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

5. LEASE DESIGNATION AND SERIAL NO.
NM 6852
6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

RECEIVED

2. NAME OF OPERATOR
THE EASTLAND OIL COMPANY

OCT 19 '90

3. ADDRESS OF OPERATOR
P. O. DRAWER 3488, MIDLAND, TX 79702

O. C. D.
ARTESIA, OFFICE

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface
UNIT LETTER E, 1980 FT. FNL AND 660 FWL, SECTION 12, TS 18S,
RG. 27E, EDDY CO., NM

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
CHUKKA FEDERAL

9. WELL NO.

2

10. FIELD AND POOL, OR WILDCAT

ARTESIA Q-G-SA

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

SEC. 12, TWP 18S, RGE. 27E

14. PERMIT NO.
30-015-20894

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

12. COUNTY OR PARISH
EDDY
13. STATE
NM

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) CHANGE OF OPERATOR

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

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

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

LEASE PURCHASED FROM FRED POOL DRILLING, INC. 09/01/90.

RECEIVED
OCT 17 11 09 AM '90
CARL
AREA

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

SIGNED Travis Reed

TITLE PRODUCTION SUPERINTENDENT

DATE 10/11/90

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

RECEIVED

OCT 18 '90

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

C. C. D.
ARTESIA OFFICE

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Operator THE EASTLAND OIL COMPANY	Well API No. 30-015-20894
Address P. O. DRAWER 3488, MIDLAND, TEXAS 79702	
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)	
New Well <input type="checkbox"/>	Change in Transporter of: <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>
Change in Operator <input checked="" type="checkbox"/>	EFFECTIVE 09/01/90

If change of operator give name and address of previous operator **FRED POOL DRILLING, INC., P. O. DRAWER 1393, ROSWELL, NM 88201**

II. DESCRIPTION OF WELL AND LEASE

Lease Name CHUKKA FEDERAL	Well No. 2	Pool Name, Including Formation ARTESIA Q-G-SA	Kind of Lease State, Federal Neotex	Lease No. 6852
Location Unit Letter E : 1980 Feet From The North Line and 660 Feet From The West Line Section 12 Township 18S Range 27E , NMPM , EDDY County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> NAVAJO CRUDE OIL PURCHASING	Address (Give address to which approved copy of this form is to be sent) BOX 159, ARTESIA, NM 88210					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> PHILLIPS PETROLEUM	Address (Give address to which approved copy of this form is to be sent) BARTLESVILLE, OK					
If well produces oil or liquids, give location of tanks.	Unit E	Sec. 12	Twp. 18S	Rge. 27E	Is gas actually connected? NO	When ?

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

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.			
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth			
Perforations					Depth Casing Shoe			
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			

V. TEST DATA AND REQUEST FOR ALLOWABLE

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

Date First New Oil Run To Tank	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size posted 10-3 10-26-90
Actual Prod. During Test	Oil - Bbls.	Water - Bbls.	Gas- MCF chg OP

GAS WELL

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

VI. OPERATOR CERTIFICATE OF COMPLIANCE

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

James Reed
Signature

PRODUCTION SUPERINTENDENT

OIL CONSERVATION DIVISION

OCT 23 1990

Date Approved

By **ORIGINAL SIGNED BY**
MIKE WILLIAMS

TRAVIS REED
Printed Name
10/08/90
Date
915/683-6293
Telephone No.

Title SUPERVISOR, DISTRICT II

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

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

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

District II
811 South First, Artesia, NM 88210

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

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised March 17, 1999

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

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

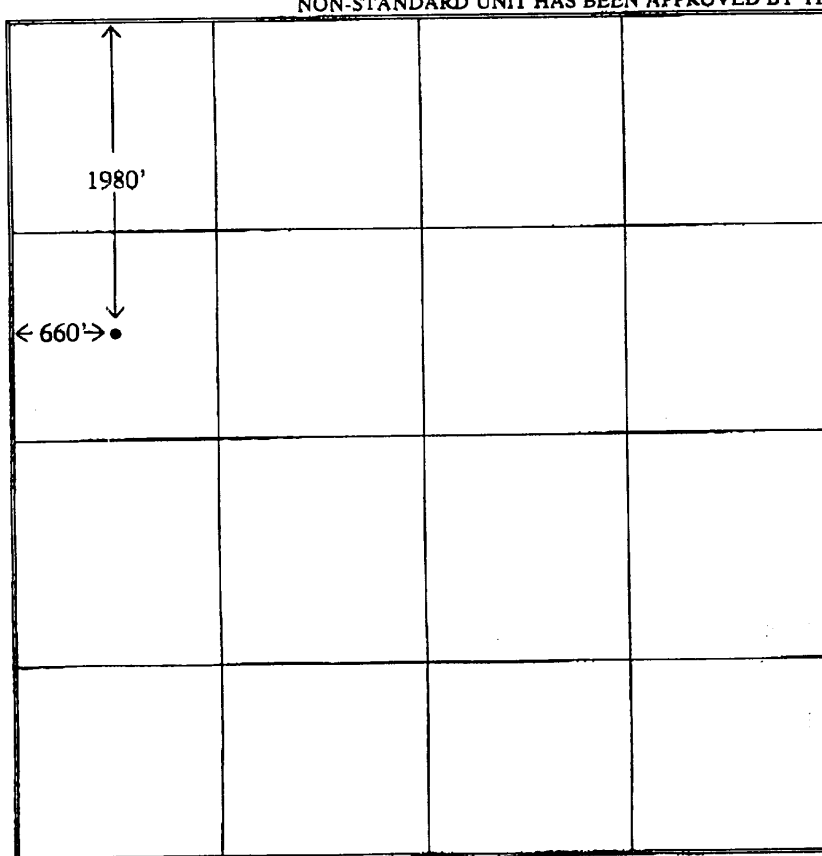
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	12	18S	27E		1980	North	660	West	Eddy

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill	Consolidation Code		Order No.				

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

	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief			
	Signature <u>Darrell Moore</u> Printed Name <u>Darrell Moore</u> Title <u>Env. Mgr. for Water & Waste</u> Date <u>4/21/99</u>			
	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey _____ Signature and Seal of Professional Surveyor: _____ Well is active. Location was not re-surveyed by Navajo. Certificate Number _____			

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 OCO FAX 748-9720

From: WAYNE PRICE - OCO SF

Date: 4/30/99

Number of Pages (Includes Cover Sheet) 7/6

Message: APPROVED BOND FOR NAWHO WDW #2

CLASS I INJECTION WELL (COPY)

If you have any trouble receiving this, please call:
(505) 827-7133



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2840 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

April 19, 1999

CERTIFIED MAIL

RETURN RECEIPT NO. Z 559 573 590

J.S. Ward & Son, Inc.
104 South Fourth Street
Artesia, New Mexico 88210-2195

Attention: Mr. Gary Sims

Re: Navajo Refining Company Discharge Plan UIC-CLI-008-2
Bond No. 58 96 12
\$ 95,000.00 One-Well Plugging Bond
to the State of New Mexico for Class I Injection Well WDW#2
1980' FNL and 660' FWL - Sec 12-Ts18s-R27e N.M.P.M.
Eddy, County, New Mexico
J.S. Ward & Son, Inc., Principal

Gulf Insurance Company, Surety
Bond 58 96 12

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

Sincerely,

RAND CARROLL,
Legal Counsel

RC/wp

cc: OCD Artesia Office
Gulf Insurance Company



J. S. Ward & Son, Inc.

101 South Fourth Street
(505) 746-2796
FAX (505) 746-4244
Artesia, New Mexico
88210-2195

Insurance
Bonds

April 22, 1999

State of New Mexico
Energy, Minerals & Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505-5472

Attention: Mr. Roger Anderson

Re: Navajo Refining Company
Bond No. 58 96 12
\$95,000 One-Well Plugging Bond
to the State of New Mexico for
Class I Injection Well
Chukka Federal #2

Dear Mr. Anderson:

Enclosed please find the captioned bond through Gulf Insurance Company which we trust you find in order and acceptable for filing.

Very truly yours,

J. S. WARD & SON, INC.

By *L. Gary Sims*

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 50 YEARS

Navajo Refining Company Gulf Insurance Company
PRINCIPAL SURETY
Post Office Box 159 101 South Fourth Street
Artesia, New Mexico 88211-0159 Artesia, New Mexico 88210-2195
Address Address
By: [Signature] [Signature]
Signature Attorney-In-Fact
Title: President [Signature]
(Note: Principal, if corporation, affix corporate seal here.) (Note: Corporate surety affix corporate seal here.)

ACKNOWLEDGEMENT FORM FOR NATURAL PERSONS

STATE OF _____) ss.
COUNTY OF _____)

On this _____ day of _____, 19____, before me personally appeared _____, to me known to be the person (persons) described in and who executed the foregoing instrument and acknowledged that he (they) executed the same as his (their) free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

Notary Public

My Commission Expires _____

ACKNOWLEDGEMENT FORM FOR CORPORATION

STATE OF New Mexico) ss.
COUNTY OF Eddy)

On this 22nd day of April, 1999, before me personally appeared Jack P. Reid, to me personally known who, being by me duly sworn, did say that he is President of Navajo Refining Company and that the foregoing instrument was signed and sealed on behalf of said corporation by authority of its board of directors, and acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

[Signature]
Notary Public

1-16-2001
My Commission Expires



OFFICIAL SEAL
Rita Beadic
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 1-16-2001

ACKNOWLEDGEMENT FORM FOR CORPORATE SURETY

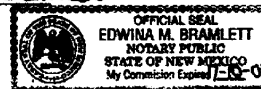
STATE OF New Mexico) ss.
COUNTY OF Eddy)

On this 22nd day of April, 1999, before me appeared S. Gary Sims, to me personally known, who, being by me duly sworn, did say that he is Attorney-in-Fact of Gulf Insurance Company and that the foregoing instrument was signed and sealed on behalf of said corporation by authority of its board of directors, and acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year in this certificate first above written.

[Signature]
Notary Public

7-10-01
My Commission Expires



(Note: Corporate surety attach power of attorney.)

APPROVED BY:

OIL CONSERVATION DIVISION OF NEW MEXICO

By: [Signature]

Date: 4/30/99



POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That GULF INSURANCE COMPANY, a corporation of the State of Missouri, hereinafter called "Company," does hereby appoint

CHARLENE M. WARD or S. GARY SIMS or JOHN C. KNIGHT

ARTESIA, NEW MEXICO

its true and lawful Attorney-in-fact to make, execute, seal and deliver on its behalf, as surety, any and all bonds and undertakings of suretyship, not to exceed \$250,000.00 or any bond where the penalty is not stated in the bond form. No authority is granted where the attorney in fact is a party at interest in the bond.

The execution of such bonds or undertakings in pursuance of these presents shall be as binding upon the Company as if they had been executed and acknowledged by the regularly elected officers of the Company.

This Power of Attorney is issued pursuant to and by authority of the following resolution of the Board of Directors of the Company, adopted effective July 1, 1983, and now in full force and effect:

"Resolved that the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary may appoint Attorneys-in-fact in any state, territory or federal district to represent this Company and to act on its behalf within the scope of the authority granted to them, in writing, which authority may include the power to make, execute, seal and deliver on behalf of this Company, as surety, and as its act and deed, any and all bonds and undertakings of suretyship and other documents that the ordinary course of surety business may require, including authority to appoint agents for the service of process in any jurisdiction, state or federal, and authority to attest to the signature of the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary and to verify any affidavit or other statement relating to the foregoing, and to certify to a copy of any of the bylaws of the Company and to any resolutions adopted by its Board of Directors; and any such Attorney-in-fact may be removed and the authority granted him revoked by the President, or any Senior Vice President, or any Vice President, or the Secretary, or any Assistant Secretary, or by the Board of Directors."

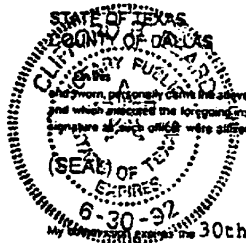
This Power of Attorney and Certificate are signed and sealed by facsimile under and by authority of the following resolution of the Board of Directors of the Company, adopted effective July 1, 1983, and now in full force and effect:

"Resolved that the signature of the President, or of any Senior Vice President, or of any Vice President, or of the Secretary, or of any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing Attorneys-in-fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, including any such power of attorney and certificate revoking the authority of the foregoing Attorneys-in-fact, as well as for the appointment of agents for the service of process in any jurisdiction, state or federal, including any such power of attorney and certificate revoking the authority of such agents; and any such power of attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power of attorney or certificate so executed and certified by such facsimile signature and facsimile seal shall be valid and binding upon the Company at the time and place where the power of attorney and certificate are executed and in the future with respect to any bond or undertaking to which they are attached."



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.

By [Signature]
Sr. Vice President



at:

12 day of April, 1991, before me, a Notary Public of the State and County aforesaid, residing therein, duly commissioned and sworn, personally came the above named officer of GULF INSURANCE COMPANY, who being by me duly sworn according to law, did depose and say that he is that officer of the company described in and which executed the foregoing instrument; that he knows the seal of said company; that the seal affixed to such instrument is the corporate seal of said company; and that the corporate seal and his signature at which office were affixed and subscribed to the said instrument by the authority and direction of said company.

[Signature]
Clifford R. Beard
Notary Public
1992

day of 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 foregoing resolutions are true and correct transcripts from the records of GULF INSURANCE COMPANY and that the above named officer was on the date of execution of the foregoing Power of Attorney authorized to execute this Power of Attorney.



I, the undersigned, have hereunto subscribed my name and affixed the corporate seal of Gulf Insurance Company this

22nd day of April, 1999.

[Signature]
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
AMOUNT OF BOND \$95,000.00
COUNTY Eddy

NOTE: For wells less than 5,000 feet deep, the minimum bond is \$5,000.00*
For wells 5,000 to 10,000 feet deep, the minimum bond is \$7,500.00*
For wells more than 10,000 feet deep, the minimum bond is \$10,000.00

*Under certain conditions, a well being drilled under a \$5,000.00 or \$7,500 bond may be permitted to be drilled as much as 500 feet deeper than the normal maximum depth, i.e., a well being drilled under a \$5,000.00 bond may be permitted to go to 5,500 feet, and a well being drilled under a \$7,500.00 bond may be permitted to go to 10,500 feet. (See Rule 101)

File with Oil Conservation Division, P. O. Box 2088, Santa Fe 87501

KNOW ALL MEN BY THESE PRESENTS:

That Navajo Refining Company, ~~XXXXXXXXXXXXXXXXXXXX~~
(a corporation organized in the State of New Mexico, with its principal office in the city
of Artesia, State of New Mexico, and authorized to do business
in the State of New Mexico), as PRINCIPAL, and Gulf Insurance Company,
a corporation organized and existing under the laws of the State of
Missouri, and authorized to do business in the State of New
Mexico, as SURETY, are held firmly bound unto the State of New Mexico, for the use and benefit of the Oil
Conservation Division of New Mexico pursuant to Section 70-2-12, New Mexico Statutes Annotated, 1978
Compilation, as amended, in the sum of Ninety-Five Thousand and no/100ths Dollars lawful money of the United
States, for the payment of which, well and truly to be made, said PRINCIPAL and SURETY hereby bind
themselves, their successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that:

WHEREAS, The above principal has heretofore or may hereafter enter into oil and gas lease, or carbon
dioxide (CO₂) gas leases, or helium gas leases, or brine mineral leases with the State of New Mexico; and

WHEREAS, The above principal has heretofore or may hereafter enter into oil and gas leases, or carbon
dioxide (CO₂) gas leases, or helium gas leases, or brine mineral leases on lands patented by the United
States of America to private individuals, and on lands otherwise owned by private individuals; and

WHEREAS, The above principal, individually, or in association with one or more other parties, has
commenced or may commence the drilling of one well not to exceed a depth of 9200
feet, to prospect for and produce oil or gas, or carbon dioxide (CO₂) gas or helium gas, or does own or
may acquire, own or operate such well, or such well started by others on land embraced in said State oil
and gas leases, or carbon dioxide (CO₂) leases, or helium gas leases, or brine minerals, and on land
patented by the United States of America to private individuals, and on land otherwise owned by private
individuals, the identification and location of said well being being
1980' FNL and 660' FWL, Section 12, Township 18, ~~XXXXXX~~ (South)
(Here state exact legal footage description)

Range 27 (East) ~~XXXX~~, N.M.P.M., Eddy County, New Mexico.

NOW, THEREFORE, If the above bounden principal and surety or either of them or their successors or
assigns, or any of them, shall plug said well when dry or when abandoned in accordance with the rules,
regulations, and orders of the Oil Conservation Division of New Mexico in such way as to confine the oil,
gas, brine, and water in the strata in which they are found, and to prevent them from escaping into other
strata;

THEN, THEREFORE, This obligation shall be null and void; otherwise and in default of complete
compliance with any and all of said obligations, the same shall remain in full force and effect.

Signed and sealed this 22nd day of April, 1999.

ATTACHMENT A

Sunday, May 9, 1999

Pressure testing the 8-5/8 inch Surface Casing from 1922 feet (KB) to 30 feet (KB) using a fresh water fluid. Pressure testing was performed after the perforations between 1446 feet and 1462 feet were squeezed with cement.

Pressure Test No. 1

Time (hrs.)	Cumulative Time (minutes)	Pressure (psig)	Delta Pressure (psi)
1303	0	660	----
1308	5	660	0
1313	10	660	0
1318	15	660	0
1323	20	660	0
1328	25	659	-1
1333	30	659	0

Total = -1 psi per 30 minutes

Pressure Test No. 2

Time (hrs.)	Cumulative Time (minutes)	Pressure (psig)	Delta Pressure (psi)
1333	0	659	----
1338	5	659	0
1343	10	659	0
1348	15	658	-1
1353	20	658	0
1358	25	657	-1
1303	30	657	0

Total = -2 psi per 30 minutes



TELEPHONE
(505) 748-3311

EASYLINK
62905278



REFINING COMPANY

501 EAST MAIN STREET • P. O. BOX 159
ARTESIA, NEW MEXICO 88211-0159

FAX
(505) 746-6410 ACCTG
(505) 746-6155 EXEC
(505) 748-9077 ENGR
(505) 746-4438 P / L

May 10, 1999

Mr. Tim Gumm
State of New Mexico
Energy, Minerals and Natural
Resources Department
Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210



RE: Re-Entry for Navajo Refining Company's Waste Disposal Well No. 2

Dear Mr. Gumm:

Navajo Refining Company (Navajo) has contracted Subsurface Technology, Inc. to re-enter, test and complete Waste Disposal Well No. 2 (WDW-2), formerly the Chukka Federal No. 2 operated by The Eastland Oil Company. The United States Department of the Interior, Bureau of Land Management approved the Application for Permit to Drill or Deepen on April 27, 1999. Subsequent approval from the State of New Mexico Oil Conservation Commission (OCD) was granted on Tuesday, May 4, 1999.

Navajo initiated field operations on Wednesday, May 5, 1999. The existing pumping equipment, rods, and tubing were removed from the wellbore. The perforations from 1446 feet to 1462 feet were squeezed using 100 sacks of Class 'H' cement (approximately 50 sacks of cement were displaced into the perforated interval). The cement was allowed to cure and drilled out to a total depth of 1922 feet (KB)(1911 feet below ground level).

On Sunday, May 9, 1999, the 8-5/8 inch surface casing, set from 1955 feet (KB) to surface, was pressure tested for internal mechanical integrity between 1922 feet (KB) and 30 feet (KB) using a packer set at 30 feet. The 8-5/8 inch surface casing was pressure tested to 660 pounds per square inch and monitored at the surface for one hour (Attachment A). The fluid used for testing was a clean fresh water fluid. A pressure loss of 1 psi (0.15%) was observed during the first 30 minutes of the test. A pressure loss of 2 psi (0.30%) was observed during the last 30 minutes of the test. The results from the pressure test confirmed internal mechanical integrity of the 8-5/8 inch surface casing from 1922 feet (KB) to 30 feet (KB).

An Independent Refinery Serving . . .
NEW MEXICO • ARIZONA • WEST TEXAS • NORTHERN MEXICO

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 microseismogram (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

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.

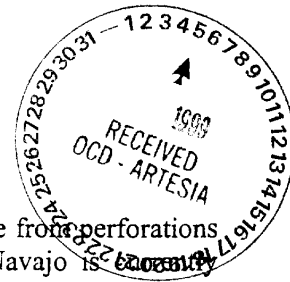
Pertinent information about the existing well is provided below:

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 formation perforations between 1446 feet and 1462 feet. Navajo is currently



ENVIROCORP SERVICES & TECHNOLOGY, INC.

7020 PORTWEST DRIVE, #100 HOUSTON, TEXAS 77024 713/880-4640 FAX 713/880-3248

Mr. Barry Hunt
Bureau of Land Management

March 30, 1999
Page 2

negotiating to purchase the well from Eastland Oil Company. The purchase should be completed by April 1, 1999.

Navajo proposes to reenter the well, squeeze the perforations from 1446 feet to 1462 feet, drill out the plugs and clean out the well to approximately 9200 feet, set 5-1/2 inch casing at 9200 feet and cement it to the surface, and conduct one or more injectivity tests. The proposed injection intervals are porous zones in the lower portion of the Wolfcamp Formation (7270 feet to 7645 feet), the Cisco Formation (7645 feet to 8390 feet), and the Canyon Formation (8390 feet to 8894 feet). Navajo's proposed reentry, testing, and recompletion procedure is included as Attachment C. A schematic of the well after recompletion is included as Attachment D.

Subsurface is currently preparing a discharge plan application for the Class I well for Navajo to submit to the New Mexico Oil Conservation Division and the BLM Roswell office near the end of April 1999. Subsurface is also preparing BLM Form 3160-3 (Application for Permit to Drill) for Navajo to submit to the BLM Roswell office.

Please contact me at (713) 880-4640 to schedule an on-site inspection of the wellsite. Do not hesitate to call me if you need additional information or if you have questions.

Sincerely,



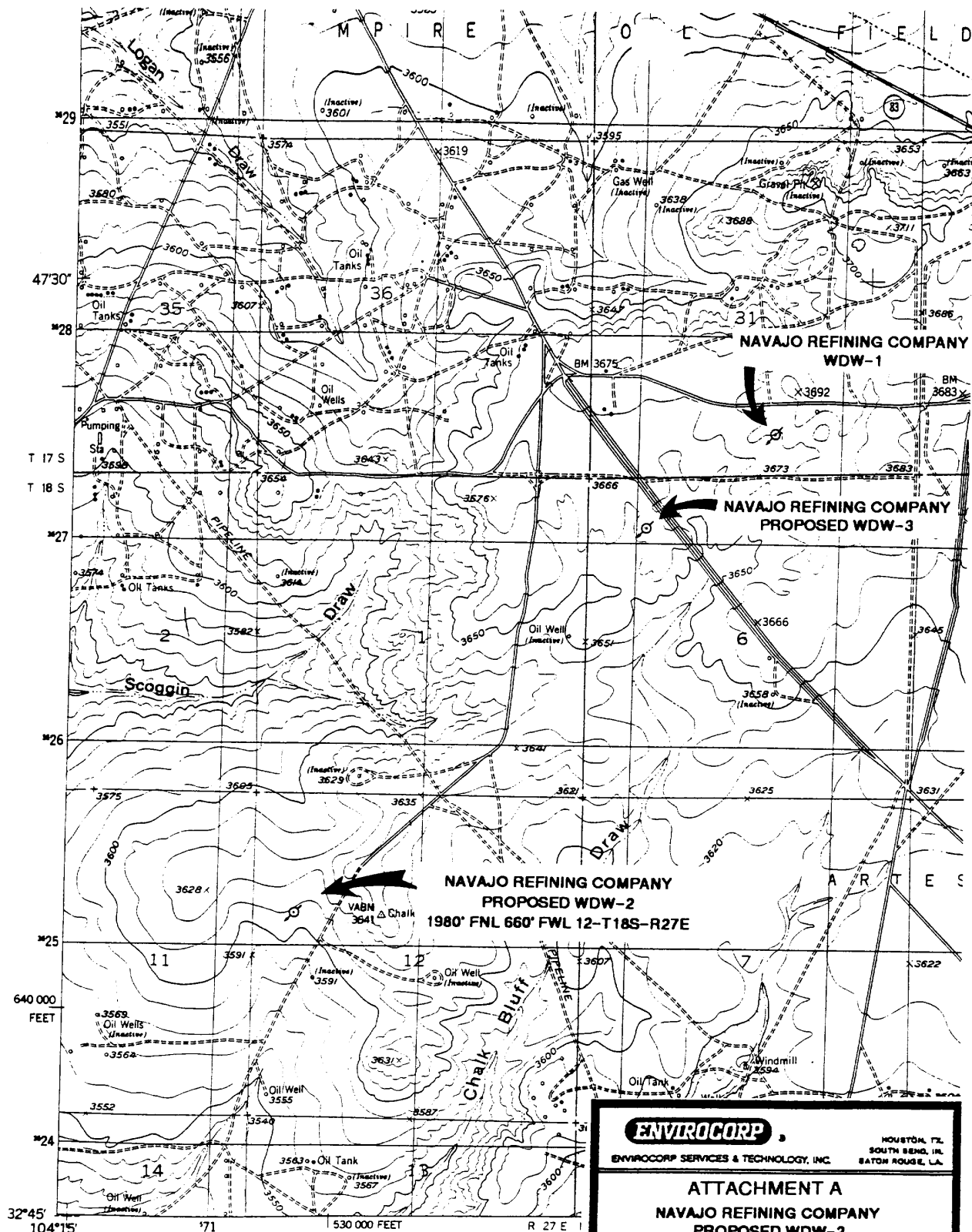
Nancy L. Niemann
Senior Geologist

NLN/paf
Attachments

c: Joe Lara – BLM, Carlsbad
David Glass – BLM, Roswell
Wayne Price – OCD, Santa Fe
Tim Gum – OCD, Artesia
Phil Youngblood – Navajo
Darrell Moore – Navajo
George Walbert – Holly Petroleum, Inc.

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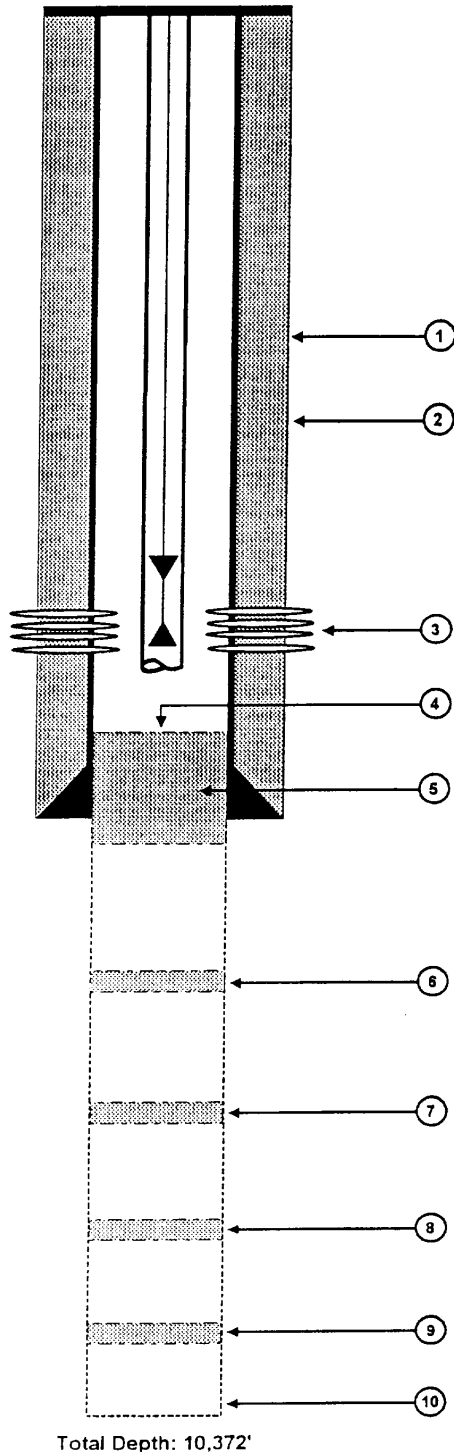
ENVIROCORP



ENVIROCORP		HOUSTON, TX
ENVIROCORP SERVICES & TECHNOLOGY, INC.		SOUTH BEND, IN
		BATON ROUGE, LA
ATTACHMENT A		
NAVAJO REFINING COMPANY		
PROPOSED WDW-2		
1980' FNL 660' FWL 12-T18S-R27E		
EDDY COUNTY, NM		
DATE:	CHECKED BY:	JOB NO:
DRAWN BY:	APPROVED BY:	DWG. NO:

BELOW GROUND DETAIL

All depths are referenced to the kelly bushing elevation of 13 feet. The surface elevation is 3610 feet.



ENVIROCORP

HOUSTON, TX.
SOUTH BEND, IN.
BATON ROUGE, LA.

ATTACHMENT III-2
NAVAJO REFINING COMPANY
CURRENT WELL CONFIGURATION
CHUKKA FEDERAL No. 2

Date: 03/10/99	Checked By: NLN	Job No.: 60A4937
Drawn By: LKM	Approved By: NLN	File: WDW2A.DS4

ATTACHMENT C

DRILLING AND RECOMPLETION PROCEDURE FOR NAVAJO REFINING COMPANY'S PROPOSED WDW-2

1. Obtain all permits and approvals for the reentry, testing and completion of a currently existing well.
2. Move in and rig up a workover unit. Remove the pumping equipment and pull the tubing out of the well.
3. Go in the hole with a squeeze packer and squeeze the perforations from 1446 feet to 1462 feet with 100 sacks of Class "H" cement. Allow the cement to cure.
4. Drill out the cement, circulate the well clean and pressure test the squeezed perforations at 500 psig for 30 minutes. Pull the squeeze tools out of the hole.
5. Conduct a CBL/VDL survey from 1912 feet to the surface. Submit the results of the pressure test and CBL/VDL survey to the OCD and the BLM for their review and approval prior to mobilizing the drilling rig.
6. After receiving approval from the OCD and the BLM to continue the reentry, prepare the location for the selected drilling rig. Construct the lined reserve pits, dig out the cellar, and install a mousehole and rathole.
7. Move in and rig up the rotary drilling rig and install the blowout preventers.
8. Drill out the following cement plugs and conduct deviation surveys every 1000 feet or on trips:
 - a. 1912 feet to 2045 feet, 40 sacks
 - b. 3620 feet to 3720 feet, 50 sacks
 - c. 5456 feet to 5556 feet, 40 sacks
 - d. 7435 feet to 7535 feet, 50 sacks
9. Clean the well out to a depth of 9200 feet and circulate and condition the hole for logging. Make a wiper trip to the base of the 8-5/8 inch surface casing while strapping the drillpipe.
10. Conduct a formation microimager (FMI) survey with gamma ray from the well's total depth to 4000 feet. Continue the four-arm caliper survey to the 8-5/8 inch

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 H₂S monitoring equipment prior to swabbing operations).
 22. Acidize the zone using diverters. Pull the packer out of the well.
 23. Perforate the next selected injection interval as determined from the open hole logs (Zone 2).

ATTACHMENT C (Continued)

24. Run a retrievable bridge plug and packer into the well and isolate Zone 2.
25. Acidize Zone 2 using diverters. Pull the retrievable bridge plug and packer out of the well, laying down the work string.
26. Conduct an injection test down the 5-1/2 inch casing at 420 gpm for 12 hours followed by a pressure falloff test.
27. Conduct a differential temperature survey and radioactive tracer survey to determine the injection profile.
28. Run the injection tubing and packer. Fill the annulus with corrosion inhibited brine.
29. Wait for the well system to come to thermal stabilization (approximately 24 hours).
30. Conduct an annulus pressure test witnessed by the OCD.
31. Rig down and move out all equipment and close the reserve pit.
32. Install the annulus monitoring system and return the well to the client.

ATTACHMENT D

BELOW GROUND DETAIL

All depths are referenced to the kelly bushing elevation of 13 feet. Surface elevation is 3610 feet.

1. Base of the USDW at 473'.

2. Casing: 8-5/8", 32 lb/ft, set at 1955' in an 11" hole. Cemented to surface with 700 sacks of cement.

3. Injection Tubing: 3-1/2".

4. DV Tool: at 5500'.

5. Annulus Fluid: Corrosion inhibited brine water.

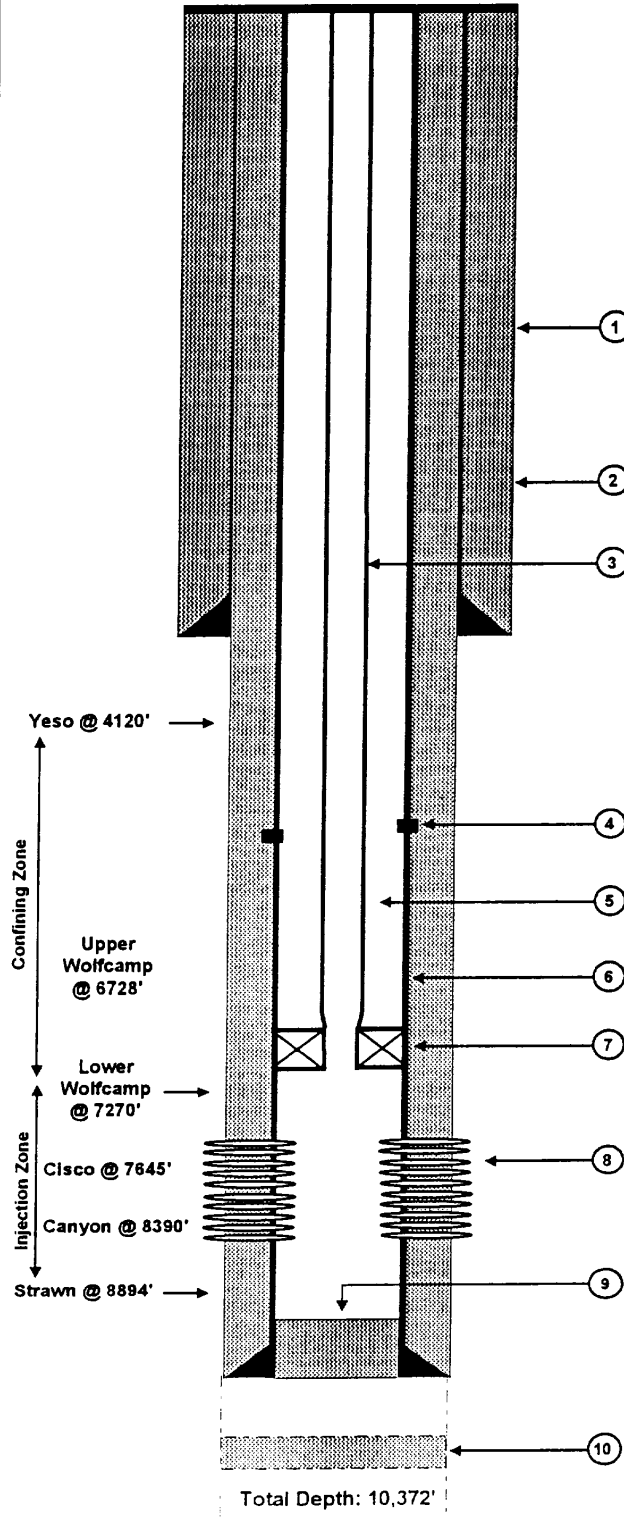
6. Protection Casing: 5-1/2" set in a 7-7/8" hole. Casing cemented to surface. Calipered hole volume plus 20% excess.

7. Packer: Fullbore retrievable packer set 100' above the top perforated injection interval.

8. Perforations:
Perforated in two intervals between 7270' and 8894'.

9. PBTD: 9200'

10. Cement Plug: 45 sacks from 9675' to 9775'.



ENVIROCORP

HOUSTON, TX.
SOUTH BEND, IN.
BATON ROUGE, LA.

ATTACHMENT III-4
NAVAJO REFINING COMPANY
PROPOSED WDW-2
ARTESIA, NEW MEXICO

Date: 03/11/99 Checked By: NLN Job No.: 60A4937
Drawn By: LKM Approved By: NLN File: WDW2B.DS4

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Navajo Refining Company Well No. 2 - WDW

Location: 1980' FNL & 660' FWL sec. 12, T. 18 S., R. 27 E.

Lease: NM-6852

.....

I. DRILLING OPERATIONS REQUIREMENTS: [Deepening]

1. The Bureau of Land Management (BLM) is to be notified at (505) 887-6544 in sufficient time for a representative to witness:

A. Cementing casing: 5-1/2 inch

2. Unless the injection casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

II. CASING:

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

III. PRESSURE CONTROL:

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

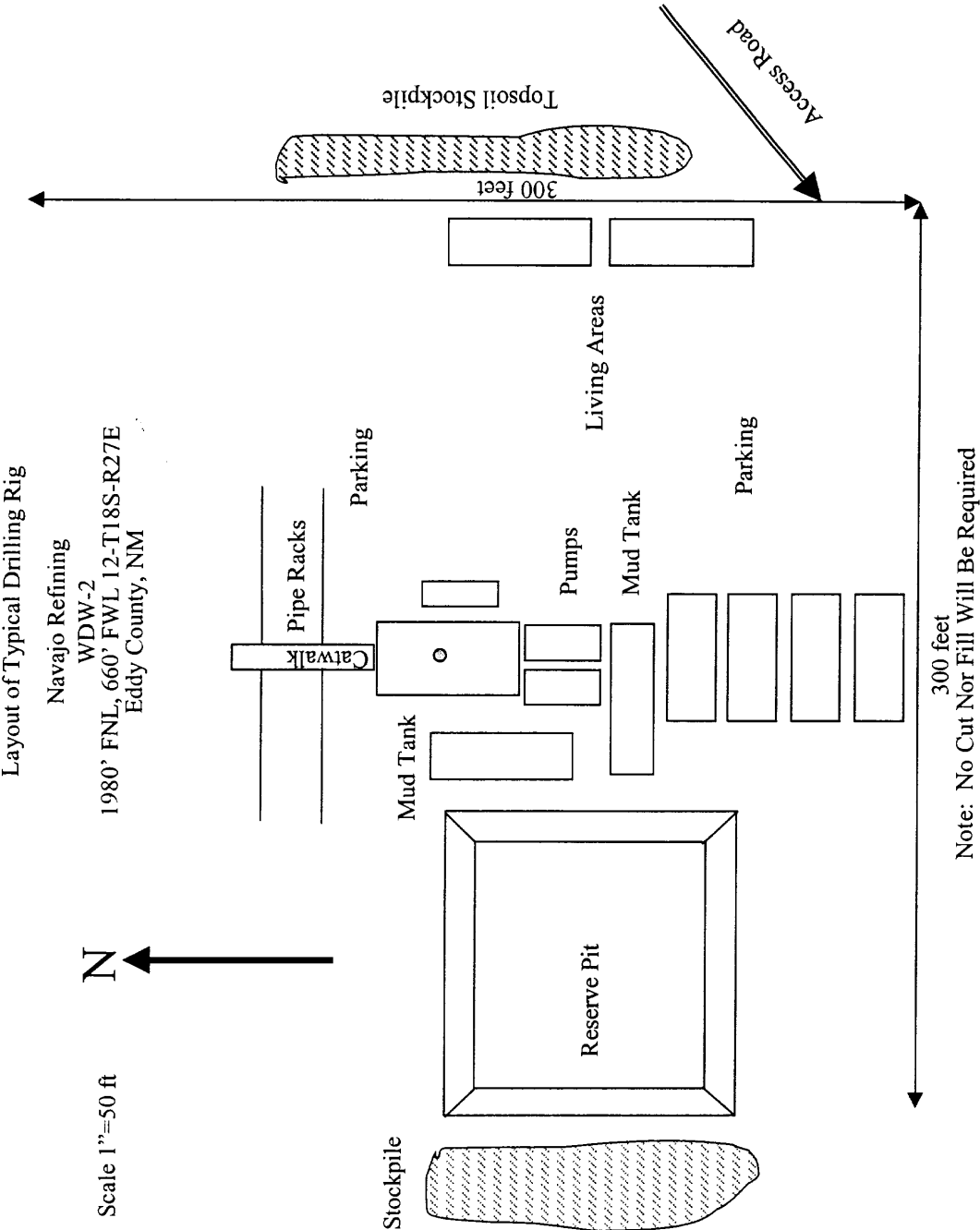
2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3000 psi.

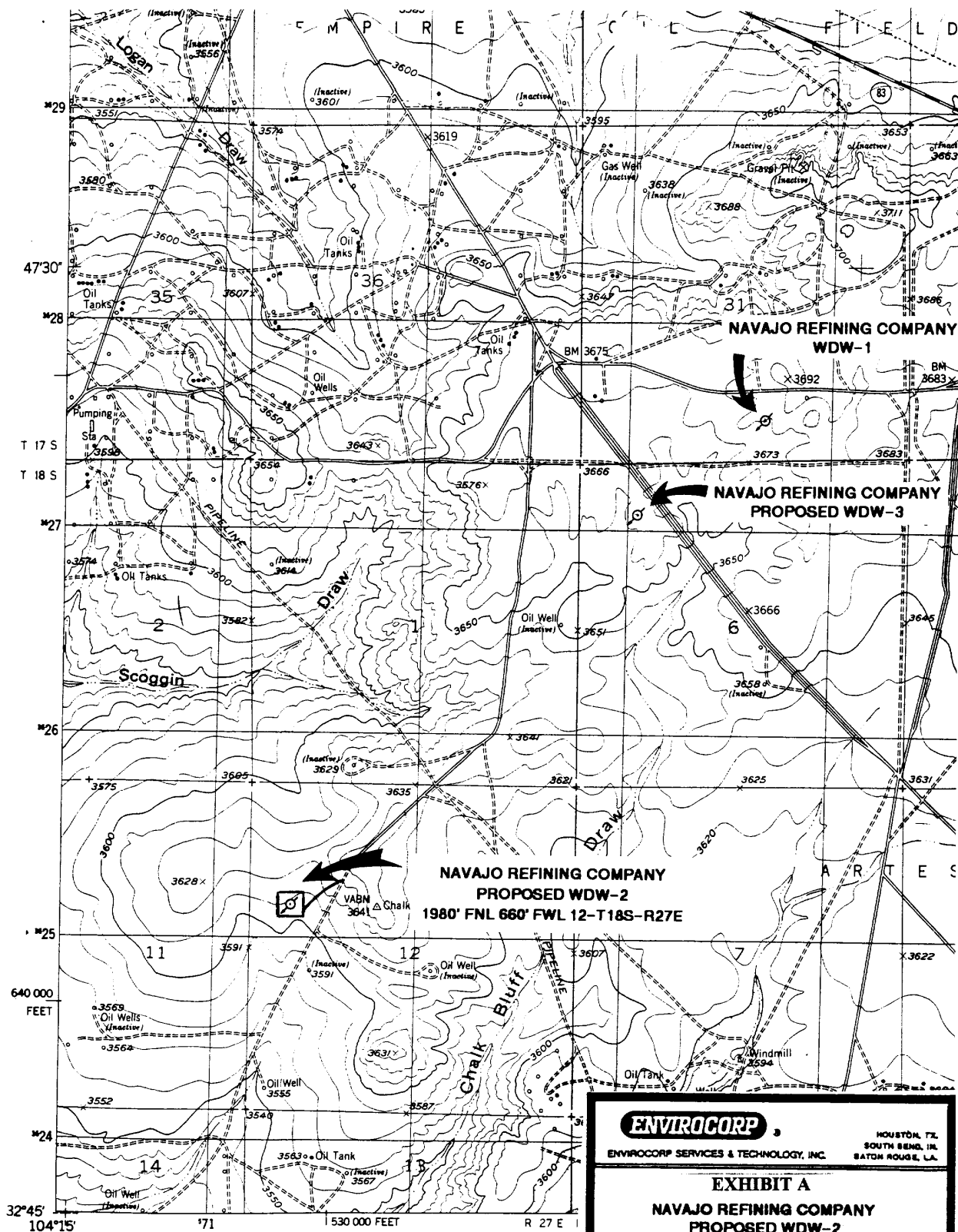
3. After drilling into the 100 foot 8-5/8 inch surface casing shoe cement plug at approximately 1912 feet and before drilling into the 100 foot Abo cement plug at approximately 5450 feet, the BOPE shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

A. The results of the test will be reported to the BLM Carlsbad Resource Area office at 620 East Greene Street, Carlsbad, New Mexico 88220-6292.

B. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

C. Testing must be done in a safe workman like manner. Hard line connections shall be required.





ENVIROCORP		HOUSTON, TX
ENVIROCORP SERVICES & TECHNOLOGY, INC.		SOUTH BEND, IN
		BATON ROUGE, LA
EXHIBIT A		
NAVJO REFINING COMPANY		
PROPOSED WDW-2		
1980' FNL 660' FWL 12-T18S-R27E		
EDDY COUNTY, NM		
DATE:	CHECKED BY:	JOB NO:
DRAWN BY:	APPROVED BY:	DWG. NO:

SURFACE USE PLAN

**NAVAJO REFINING COMPANY
PROPOSED WDW-2
1980' FSL, 660' FWL of 12-T18S-R27E
EDDY COUNTY, NEW MEXICO**

1. Existing Roads: Existing roads that lead to the proposed drillsite are shown on Exhibit A.
2. Access Roads To Be Constructed: No new access road is proposed.
3. Location of Existing Wells: Existing wells within one mile of proposed WDW-2 are shown on Exhibit B.
4. Location of Proposed Facilities If Well Is Completed: The well will be shut in after completion and testing.
5. Location and Type of Water Supply: Water for reentry, testing, and completion operations will be purchased from a commercial water hauler.
6. Source of Construction Materials: Materials required for construction of the site will be taken from a state-owned pit.
7. Methods of Handling Waste Disposal:
 - A. Drill cuttings will be disposed of in the drilling pits.
 - B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
 - C. Water produced during tests will be disposed of in the drilling pits.
 - D. Trash, waste paper, garbage, and junk will be buried in a trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit C.

- E. All trash and debris will be buried or removed from the wellsite after finishing drilling and/or completion operations.
8. Ancillary Facilities: None anticipated.
9. Wellsite Layout:
- A. The wellsite will be surveyed, and a 400' x 400' area will be staked and flagged.
 - B. The dimensions and relative location of the drill pad, mud pit, and trash pit, with respect to the wellbore, are shown on Exhibit C.
 - C. Existing topsoil to a depth of 6 inches will be lifted and stockpiled at the northeastern (uphill) end of the well pad. The stockpiled topsoil will be located uphill to avoid mixing with subsurface materials.
 - D. The well pad will be surfaced with material found in place.
 - E. The pits for mud and cuttings will be lined with 6-mil plastic.
10. Plans for Restoration of Surface:
- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk.
 - B. Any unguarded pits containing fluids will be fenced until they are filled.
 - C. After abandonment, all equipment, trash, and junk will be removed and the location cleaned.
 - D. The stockpiled topsoil will be spread over the surface of the location.
11. Surface Ownership: U.S. Department of Interior, Bureau of Land Management.

12. Archaeological Survey: An archaeological survey of the drill pad was submitted to the BLM on July 31, 1985, on behalf of Fred Pool Drilling Company. An archeological survey was conducted by Navajo Refining Company and will be submitted by Navajo under separate cover.
13. Operator's Representatives: Representatives responsible for assuring compliance with the approved Surface Use Plan:

Mr. Darrell Moore
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.

4/12/99
Date

Darrell Moore
Signature
Darrell Moore
Name
Env. Mgr. for Water & Waste
Title
Navajo Refining Company
Company

BOP Minimum Requirements

- a. 11-inch, 3000-psi working pressure double-hydraulic BOP.
- b. 11-inch, 3000-psi working pressure annular BOP.
- c. 3-inch, 3000-psi working pressure manual choke manifold.

A schematic of the BOP stack is included as Exhibit A.

- 8. Drill out the following cement plugs and conduct deviation surveys every 1000 feet or on trips:
 - a. 1912 feet to 2045 feet, 40 sacks
 - b. 3620 feet to 3720 feet, 50 sacks
 - c. 5456 feet to 5556 feet, 40 sacks
 - d. 7435 feet to 7535 feet, 50 sacks

Estimated Tops of Geologic Formations

San Andres	2005'	Lower Wolfcamp	7270'
Yeso	4210'	Cisco	7645'
Abo	5506'	Canyon	8390'
Wolfcamp	6728'	Strawn	8894'

No fresh water or hydrocarbons are expected to be encountered.

Expected Bottom-Hole Pressure and Hazards

The expected bottom-hole pressure is 3500 psia at the total depth of 9200 feet. The bottom-hole pressure was determined from the pressure measured in Navajo's WDW-1, or 2928 psia, at 7924 feet. Navajo's WDW-1 is completed in the same interval proposed for WDW-2 and is located 11,000 feet northeast of WDW-2 in 31-T17S-R28E. The average specific gravity of the fluid between 7924 feet and 9200 feet is expected to be 1.034, which is the specific gravity of the fluid swabbed from the interval between 8220 feet and 8476 feet in WDW-1. The expected bottom-hole pressure at 9200 feet in proposed WDW-2 is calculated below:

$$\begin{aligned}\text{BHP (9200 feet)} &= 2928 \text{ psia} + (9200 \text{ feet} - 7924 \text{ feet}) \times 0.433 \text{ psi/ft} \times 1.034 \\ &= 3500 \text{ psia}\end{aligned}$$

No abnormal pressures or temperatures or other hazards are expected while drilling or testing the well. Hydrogen sulfide monitoring equipment will be set up prior to swabbing operations.

9. Clean the well out to a depth of 9200 feet and circulate and condition the hole for logging. Make a wiper trip to the base of the 8-5/8 inch surface casing while strapping the drillpipe.
10. Conduct a formation microimager (FMI) survey with gamma ray from the well's total depth to 4000 feet. Continue the four-arm caliper survey to the 8-5/8 inch casing shoe. Process the FMI for fracture identification over the lower 200 feet of the confining zone and zones of interest in the injection zone, if warranted.
11. Spot a gelled pill at 9200 feet and lay down the drillpipe.
12. Run the 5-1/2 inch, 17-lb/ft, J-55, LT&C casing with a packoff shoe and float collar to 9200 feet. Install a "DV" tool at approximately 5800 feet. Run centralizers at approximately 120-foot intervals.
13. Cement the 5-1/2 inch casing in place. Use a minimum of 20% excess cement as calculated from the caliper log. Circulate cement to the surface and allow to cure.

Cement Program

- a. Stage 1 Cement (total depth to 5800 feet): Lightweight Class H with fly ash, gel, friction reducer, and salt mixed with fresh water.
 - b. Stage 2 Lead Cement (5200 feet to the surface): Lightweight Class C with gel and bridging agents mixed with fresh water.
 - c. Stage 2 Tail Cement (5800 feet to 5200 feet): Class C mixed with fresh water.
14. Clean out the mud pits and release the drilling rig 12 hours after cementing the 5-1/2 inch casing in place.
 15. Stabilize the 5-1/2 inch casing at the surface using ready-mix cement.

16. Move in and rig up the completion rig pump, tank, power swivel, and work string. Install the blowout preventer.
17. Run in the well with a 4-3/4 inch bit to the "DV" tool and test the casing to 1500 psig for 30 minutes.
18. Drill out the "DV" tool and clean out the wellbore to the float collar. Test the casing to 1500 psig for 30 minutes. Circulate the wellbore with clean brine, preceded by 15% HCL to clean the casing. Trip the work string out of the well.
19. Conduct the casing inspection, CBL/VDL, and differential temperature surveys.
20. Perforate the selected injection interval as determined from the open hole logs. Depending on the height of the perforated interval, the interval may be perforated in two stages, as Zone Nos. 1 and 2.
21. Run in the well with a packer and tailpipe. Set the packer above the top perforation and swab test the perforated interval. Recover at minimum two tubing volumes of the reservoir fluid for analysis (Note: Set up H₂S monitoring equipment prior to swabbing operations).
22. Acidize the perforated zone (Zone 1) using diverters. Pull the packer out of the well.
23. Perforate the next selected injection interval (Zone 2) as determined from the open hole logs.
24. Run a retrievable bridge plug and packer into the well and isolate Zone 2.
25. Acidize Zone 2 using diverters. Pull the retrievable bridge plug and packer out of the well, laying down the work string.
26. Conduct an injection test down the 5-1/2 inch casing at 420 gpm for 12 hours, followed by a pressure falloff test.
27. Conduct a differential temperature survey and radioactive tracer survey to determine the injection profile.

28. Run the injection tubing and packer. Fill the annulus with corrosion inhibited brine.
29. Wait for the well system to come to thermal stabilization (approximately 24 hours).
30. Conduct an annulus pressure test witnessed by the OCD.
31. Rig down and move out all equipment and close the reserve pit.
32. Install the annulus monitoring system and return the well to the client.

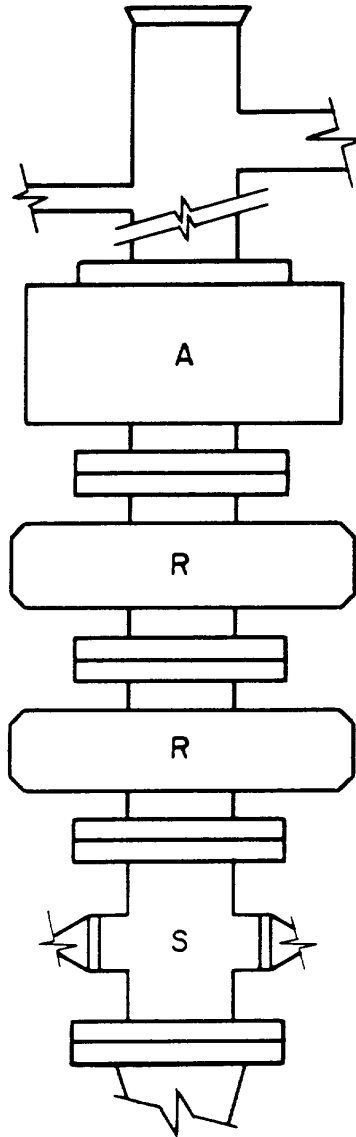
Logging, Testing, And Coring Program

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

No coring is planned.

The proposed logging program is described below:

HOLE/CASING	OPEN-HOLE LOGS	CASED-HOLE LOGS
Proposed WDW-2		
11 inch Surface Borehole (8-5/8 inch Casing) 1995 feet		Logs Run in 1973: Gamma Ray Logs Proposed on Reentry: Cement Bond/Variable Density Casing Inspection Log
7-7/8 inch Long-String Borehole (5-1/2 inch Casing) 9200 feet	Logs Run on August 27, 1973: Dual Induction-Laterolog/ Spontaneous Potential Compensated Neutron/ Formation Density Caliper Gamma Ray Logs Proposed on Reentry: Fracture Identification Log 4-Arm Caliper	Logs Proposed on Reentry: Cement Bond/Variable Density Casing Inspection Log Differential Temperature Log Radioactive Tracer Survey



A = ANNULAR-TYPE BLOWOUT PREVENTER
11-inch throughbore, 3000-psi working pressure

R = RAM-TYPE BLOWOUT PREVENTER
11-inch throughbore, 3000-psi working pressure

S = DRILLING SPOOL WITH SIDE OUTLET CONNECTIONS
FOR CHOKE AND KILL LINES

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

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

ENVIROCORP		HOUSTON, TX. SOUTH BEND, IN. BATON ROUGE, LA.
ENVIROCORP SERVICES & TECHNOLOGY, INC.		
EXHIBIT A		
BLOWOUT PREVENTER STACK AND MINIMUM REQUIREMENTS		
DATE: 4/7/98	CHECKED BY: JDB	JOB NO:
DRAWN BY: ALN	APPROVED BY:	DWG. NO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Oil Cons. Division

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input type="checkbox"/> DEEPEN <input type="checkbox"/> Reenter <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. NM 6852		
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> Class I Waste Disposal Well <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
2. NAME OF OPERATOR Navajo Refining Company 15694			7. UNIT AGREEMENT NAME 23592		
3. ADDRESS AND TELEPHONE NO. Post Office Box 159, Artesia, New Mexico 88210			8. FARM OR LEASE NAME, WELL NO. WDW-#2		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1980' FNL and 660' FWL Unit Letter At proposed prod. zone			9. API WELL NO. 30-015-20894		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 11 air miles east-southeast of Artesia			10. FIELD AND POOL, OR WILDCAT L. Wolfcamp-Cisco-Canyon Injection Zone		
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1980' FNL and 660' FWL Unit Letter			11. SEC., T., R., M., OR S.E. AND SURVEY OR AREA 12-T18S-R27E		
16. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.			12. COUNTY OR PARISH Eddy		
17. NO. OF ACRES ASSIGNED TO THIS WELL			13. STATE NM		
18. PROPOSED DEPTH 9200'			20. ROTARY OR CABLE TOOLS Rotary		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3607' GR, 3623' KB			22. APPROX. DATE WORK WILL START May 1, 1999		

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8-5/8"	32 lb/ft	1995'	800 sx circulated
7-7/8"	5-1/2"	17 lb/ft	9200'	Caliper volume + 20% excess

Proposed reentry of the Eastland Oil Company (originally Fred Pool Drilling, Inc.) Chukka Federal No. 2 (PBDT 1912 feet, September 10, 1985) formerly Amoco Production Company Diamond Federal Gas Com. No. 1 (OTD 10,372 feet, P&A August 31, 1973). The well currently produces oil and gas from perforations from 1446 feet to 1462 feet (Penrose).

Navajo will squeeze the perforations from 1446 feet to 1462 feet, drill out cement plugs and clean out the well to 9200 feet, set 5-1/2 inch casing at 9200 feet and cement to the surface, perforate porous intervals in the Lower Wolfcamp, Cisco, and Canyon Formations between 7270 feet and 9200 feet, and conduct injectivity tests.

Attached are the Well Location Plat, Drilling Program, and Surface Use Plan.

SUBJECT TO
LIKE APPROVAL
BY STATE AND RIGHT OF WAY

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

4. ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed zone. If proposal is to drill or open directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give details of program, if any.

SIGNED David Mose TITLE Env. Mgr. DATE 4/15/99
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
CONDITIONS OF APPROVAL, IF ANY:

(ORIG. SGD.) DAVID R. GLASS

PETROLEUM ENGINEER

APR 27 1999

APPROVED BY _____ TITLE _____ DATE _____

*See Instructions On Reverse Side

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 or any matter within its jurisdiction.

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

District II
811 South First, Artesia, NM 88210

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

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised March 17, 1999

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-20894	² Pool Code	³ Pool Name Lower Wolfcamp-Cisco-Canyon Injection Zone
⁴ Property Code	⁵ Property Name WDW-2	⁶ Well Number
⁷ OGRID No.	⁸ Operator Name Navajo Refining Company	⁹ Elevation 3607' GR

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	12	18S	27E		1980	North	660	West	Eddy

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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

				¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i> Signature: <u>Darrell Moore</u> Printed Name: <u>Darrell Moore</u> Title: <u>Env. Mgr.</u> Date: <u>4/15/99</u>
				¹⁸ SURVEYOR CERTIFICATION <i>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.</i> Date of Survey Signature and Seal of Professional Surveyor: Well is active. Location was not re-surveyed by Navajo. 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.

4/12/99
Date

Darrell Moore
Signature
Darrell Moore
Name
Env. Mgr. for Water & Waste
Title
Navajo Refining Company
Company

TELEPHONE
(505) 748-3311

EASYLINK
62905278



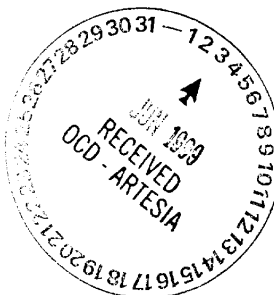
N.M. Oil Cons. Division
811 S. 1st Street
ARTESIA, NEW MEXICO 88211-0159
ARTEFINING COMPANY

501 EAST MAIN STREET • P. O. BOX 159
ARTESIA, NEW MEXICO 88211-0159

C/SK
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).

An Independent Refinery Serving . . .
NEW MEXICO • ARIZONA • WEST TEXAS • NORTHERN MEXICO

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 microseismogram (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

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

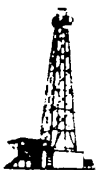
File: Injection Wells

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 04 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

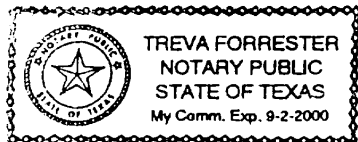
STATE OF TEXAS)
)
COUNTY OF MIDLAND)

The foregoing was acknowledged before me this 2nd day of June, 1999 by Rebecca A. Edwards.

MY COMMISSION EXPIRES:

Treva Forrester

NOTARY PUBLIC



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

T. Anhy	
T. Salt	
B. Salt	
T. Yates	
T. 7 Rivers	
T. Queen	
T. Grayburg	
T. San Andres	2005
T. Glorieta	
T. Paddock	
T. Blinebry	
T. Tubb	
T. Drinkard	
T. Abo	5506
T. Wolfcamp	6728
T. Penn	
T. Cisco (Bough C)	7645

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.	

Northwestern New Mexico

T. Ojo Alamo _____
T. Kirtland-Fruitland _____
T. Pictured Cliffs _____
T. Cliff House _____
T. Menefee _____
T. Point Lookout _____
T. Mancos _____
T. Gallup _____
Base Greenhorn _____
T. Dakota _____
T. Morrison _____
T. Todilto _____
T. Entrada _____
T. Wingate _____
T. Chinle _____
T. Permian _____
T. Penn "A" _____

T. Penn. "B" _____
T. Penn. "C" _____
T. Penn. "D" _____
T. Leadville _____
T. Madison _____
T. Elbert _____
T. McCracken _____
T. Ignacio Otzte _____
T. Granite _____
T. _____
T. _____
T. _____
T. _____
T. _____
T. _____
T. _____
T. _____

OIL OR GAS SANDS OR ZONES

No. 1, from.....to.....
No. 2, from.....to.....

No. 3, from.....to.....
No. 4, from.....to.....

IMPORTANT WATER SANDS

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

No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology

From	To	Thickness In Feet	Lithology

Submit To Appropriate District Office
State Lease - 6 copies
Fee Lease - 5 copies
District I
1625 N. French Dr., Hobbs, NM 87240
District II
811 South East, Artesia, NM 87210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-105
Revised March 25, 1999

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Federal Well

WELL API NO.
30-015-20894

5. Indicate Type of Lease

STATE ☐ FEE ☒ Federal

State Oil & Gas Lease No. NM 6852

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Class I Waste Disposal Well			7. Lease Name or Unit Agreement Name Navajo Refining Company WDW-2		
b. Type of Completion: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Re-completion			8. Well No. WDW-2		
2. Name of Operator Navajo Refining Company			9. Pool name or Wildcat L. Wolfcamp-Cisco-Canyon Injection Zone Navajo Permo-Penn		
3. Address of Operator Post Office Box 159, Artesia, New Mexico 88211			10. Well Location Unit Letter <u>E</u> <u>1980</u> Feet From The <u>North</u> Line and <u>660</u> Feet From The <u>West</u> Line Section <u>12</u> Township <u>18 South</u> Range <u>27 East</u> NMPM Eddy County		
10. Date Spudded July 18, 1973	11. Date T.D. Reached August 27, 1973	12. Date Compl. (Ready to Prod.) June 8, 1999	13. Elevations (DF& R(B. RT, GR, etc.) 3607 feet GL, 3623 feet RKB	14. Elev. Casinghead 3609 feet GL	
15. Total Depth 10,372 feet	16. Plug Back T.D. 8770 feet	17. If Multiple Compl. How Many Zones? 1	18. Intervals Drilled By All	Rotary Tools N/A	
19. Producing Interval(s), of this completion - Top, Bottom, Name L. Wolfcamp-Cisco-Canyon			20. Was Directional Survey Made Yes		
21. Type Electric and Other Logs Run Fracture Finder and Caliper Logs, Dual Induction Laterolog, Compensated Neutron Formation Density			22. Was Well Cored No		

23. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	N/A	40'	N/A	N/A	None
8-5/8"	32	1995'	11"	800 sacks circulated	None
5-1/2"	17	8869'	7-7/8"	1570 sacks circulated	None

24. LINER RECORD				25. TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					3-1/2"	7528'	7528'
26. Perforation record (interval, size, and number) 7570' to 7620', 7676' to 7736', 7826' to 7834', 7858' to 7880', 7886' to 7904', 7916' to 7936', 7944' to 7964', 7990' to 8042', 8096' to 8116', 8191' to 8201', 8304' to 8319', 8395' to 8399' (2 jsf for total of 598 holes).				DEPTH INTERVAL 7570' to 8399'			AMOUNT AND KIND MATERIAL USED 10,000 gallons of 15% HCl, plus 4600 pounds of rock salt as diverter

28. PRODUCTION							
Date First Production N/A		Production Method (Flowing, gas lift, pumping - Size and type pump) N/A			Well Status (Prod. or Shut-in) N/A		
Date of Test N/A	Hours Tested N/A	Choke Size N/A	Prod'n For Test Period	Oil - Bbl --	Gas - MCF --	Water - Bbl --	Gas - Oil Ratio --
Flow Tubing Press. --	Casing Pressure --	Calculated 24-Hour Rate	Oil - Bbl --	Gas - MCF --	Water - Bbl --	Oil Gravity - API - (Corr.) --	
29. Disposition of Gas (Sold, used for fuel, vented, etc.) N/A						Test Witnessed By	

30. List Attachments		Deviation Report	
31. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief			
Signature Darrell Moore	Printed Name Darrell Moore	Title Env Mgr.	Date 7/14/99

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

DESIGNATION AND SERIAL NO.

NM 6852

IF INDIAN, ALLOTTEE OR TRIBE NAME

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL OIL WELL ☐ GAS WELL ☐ DRY ☐ ☒ Other Class I Waste Disposal Well

1b. TYPE OF COMPLETION NEW WELL ☒ DEEPEN ☐ PLUG BACK ☐ DIFF-GENVR ☐ ☒ Other Reentry

2. NAME OF OPERATOR Navajo Refining Company

3. ADDRESS AND TELEPHONE NO. Post Office Box 159, Artesia, New Mexico 88211

4. LOCATION OF WELL At surface 1980' FNL and 660' FWL Unit Letter E
At top prod. interval reported below
Same
At total depth
Same

14. PERMIT NO. WDW-2
DATE ISSUED April 27, 1999

12. COUNTY OR PARISH Eddy
13. STATE New Mexico

15. DATE SPUNDED 7-18-73
16. DATE T.D. REACHED 8-27-73
17. DATE COMP (Ready to prod.) 6-8-99
18. ELEVATIONS (OF, RKB, RT, GR, ETC.)* 3607' GL; 3623' RKB
19. ELEV. CASINGHEAD 3609' GL

20. TOTAL DEPTH, MD & TVD 10,372' TVD
21. PLUG, BACK T.D., MD & TVD 8770'
22. IF MULTIPLE COMPL. HOW MANY* 1
23. INTERVALS DRILLED BY All
24. PRODUCING INTERVAL (S), OF THIS COMPLETION - TOP, BOTTOM NAME (MD AND TVD)* L. Wolfcamp-Cisco-Canyon

25. WAS DIRECTIONAL SURVEY MADE? Yes

27. WAS WELL CORED? No

26. TYPE ELECTRIC AND OTHER LOGS RUN Fracture Finder and Caliper Logs, Dual Induction Laterlog, Compensated Neutron, Formation Density

CASING RECORD				(Report all strings set in well)	
CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
13-3/8"	N/A	40'	N/A	Surface	None
8-5/8"	32	1995'	11	Surface, 800 sx C1H	None
5-1/2"	17	8869'	7-7/8"	Surface, 1570 sx C1H and C1C	None

LINER RECORD				TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)
					3-1/2"	7528'
						7528'

PERFORATION RECORD		ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
(Interval, size and number)		DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7570'-7620', 7676'-7736', 7826'-7834'		7570' to 8399'	10,000 gallons 15% HCL plus 4600 pounds of rock salt as diverter
7858'-7880', 7886'-7904', 7916'-7936'			
7944'-7964', 7990'-8042', 8096'-8116'			
8191'-8201', 8304'-8319', 8395'-8399'			
(2 ispf for total of 598 holes)			

PRODUCTION				WELL STATUS (Producing or shut-in)	
DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump)			N/A	
N/A	N/A				
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	WATER-BBL.	GAS-OIL RATIO
N/A	N/A	N/A		--	--
FLOW, TUBING PRESS	CASING PRESSURE	24-HOUR RATE CALCULATED	OIL-BBL.	GAS-MCF.	WATER-BBL.
N/A	N/A				

34. DISPOSITION OF (Solid, used for fuel, vented, etc.) N/A

35. LIST OF ATTACHMENTS

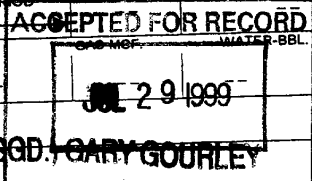
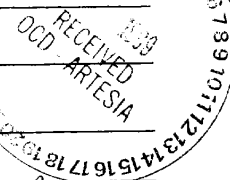
Deviation Report

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

SIGNED David Mince TITLE Env. Mgr. DATE 7/19/99

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

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





Patterson Drilling Company

RECEIVED
410 N. Loraine Street — (915) 682-9401
Midland, Texas 79701
1999 JUL 21 A 10 23

RECEIVED

JUN 04 1999

SUBSURFACE TECHNOLOGY, INC.

June 2, 1999

BUREAU OF LAND MGMT.
OIL & GAS RESOURCE AREA

Drilling Department
Subsurface Construction Corporation
7020 Port West, Ste 100
Houston, TX 77024

RE: Inclination Report
Navajo WDW-2
Sec 12; T-18-S; R-27-E

Gentlemen:

The following is an inclination survey on the above referenced well located in Eddy County, New Mexico:

2898' - 0.25
3838' - 0.25
4783' - 0.50
6106' - 0.75
6633' - 0.50

Sincerely,

Rebecca Edwards

Rebecca A. Edwards
Administrative Assistant

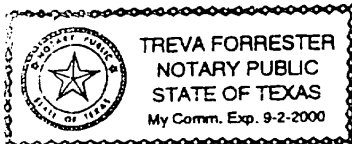
STATE OF TEXAS)
)
COUNTY OF MIDLAND)

The foregoing was acknowledged before me this 2nd day of June, 1999 by Rebecca A. Edwards.

MY COMMISSION EXPIRES:

Treva Forrester

NOTARY PUBLIC



TELEPHONE
(505) 748-3311

EASYLINK
62905278



REFINING COMPANY

501 EAST MAIN STREET • P. O. BOX 159
ARTESIA, NEW MEXICO 88211-0159

July 19, 1999

FAX

(505) 746-6410 ACCTG
(505) 746-6155 EXEC
(505) 748-9077 ENGR
(505) 746-4438 P / L

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.

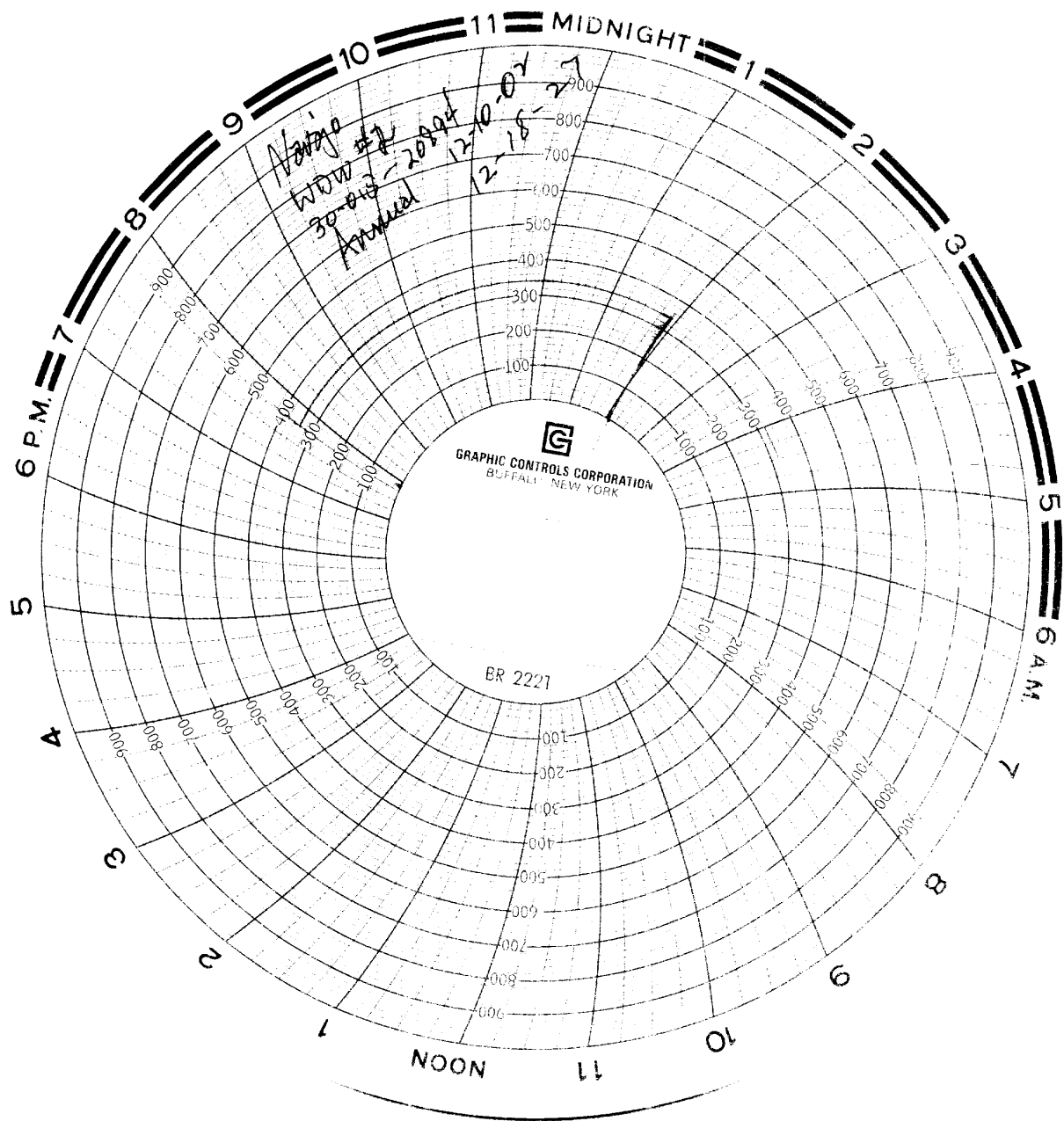
Sincerely,
NAVAJO REFINING COMPANY

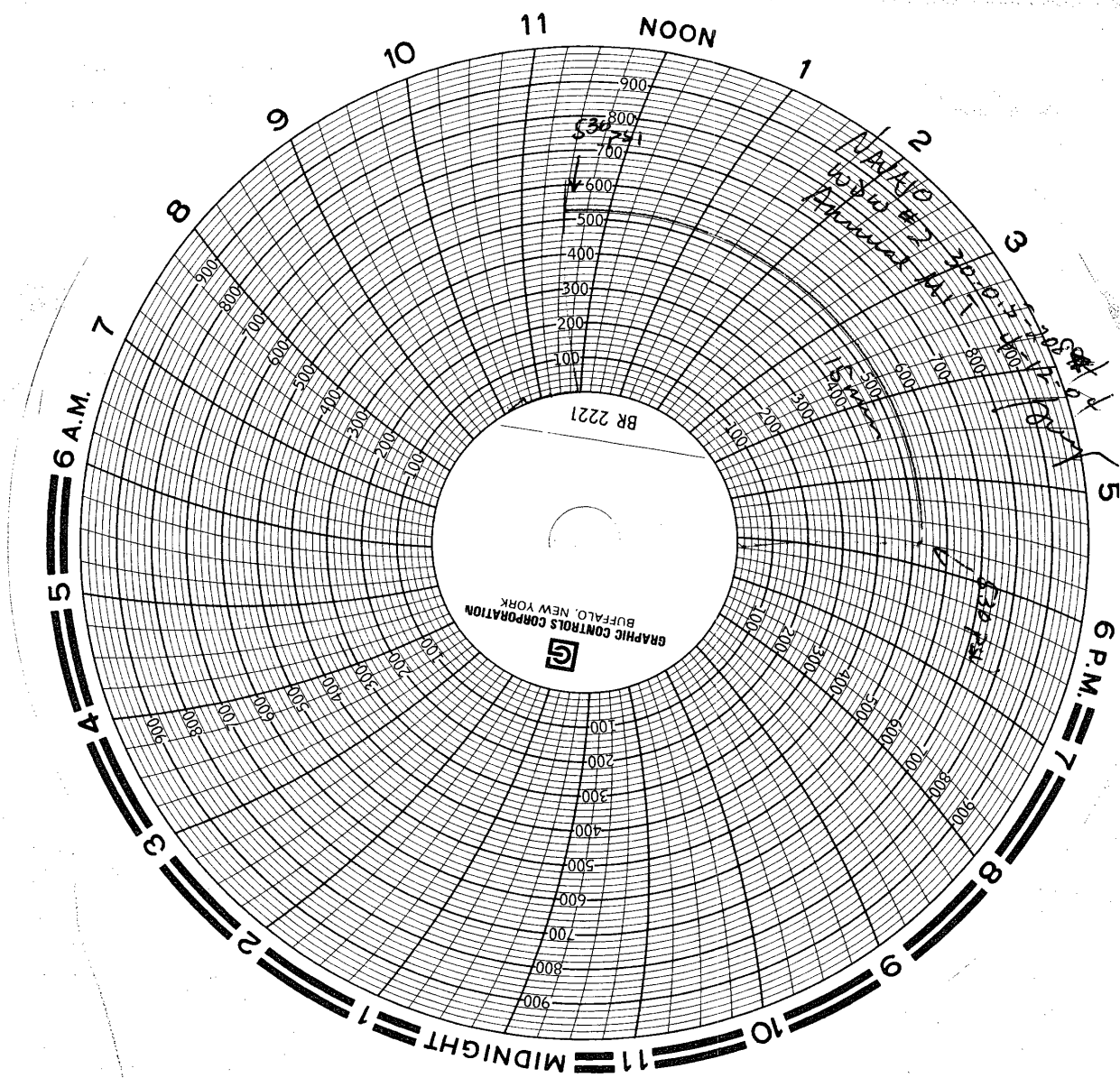
Darrell Moore
Environmental Mgr. for Water and Waste

Encl.

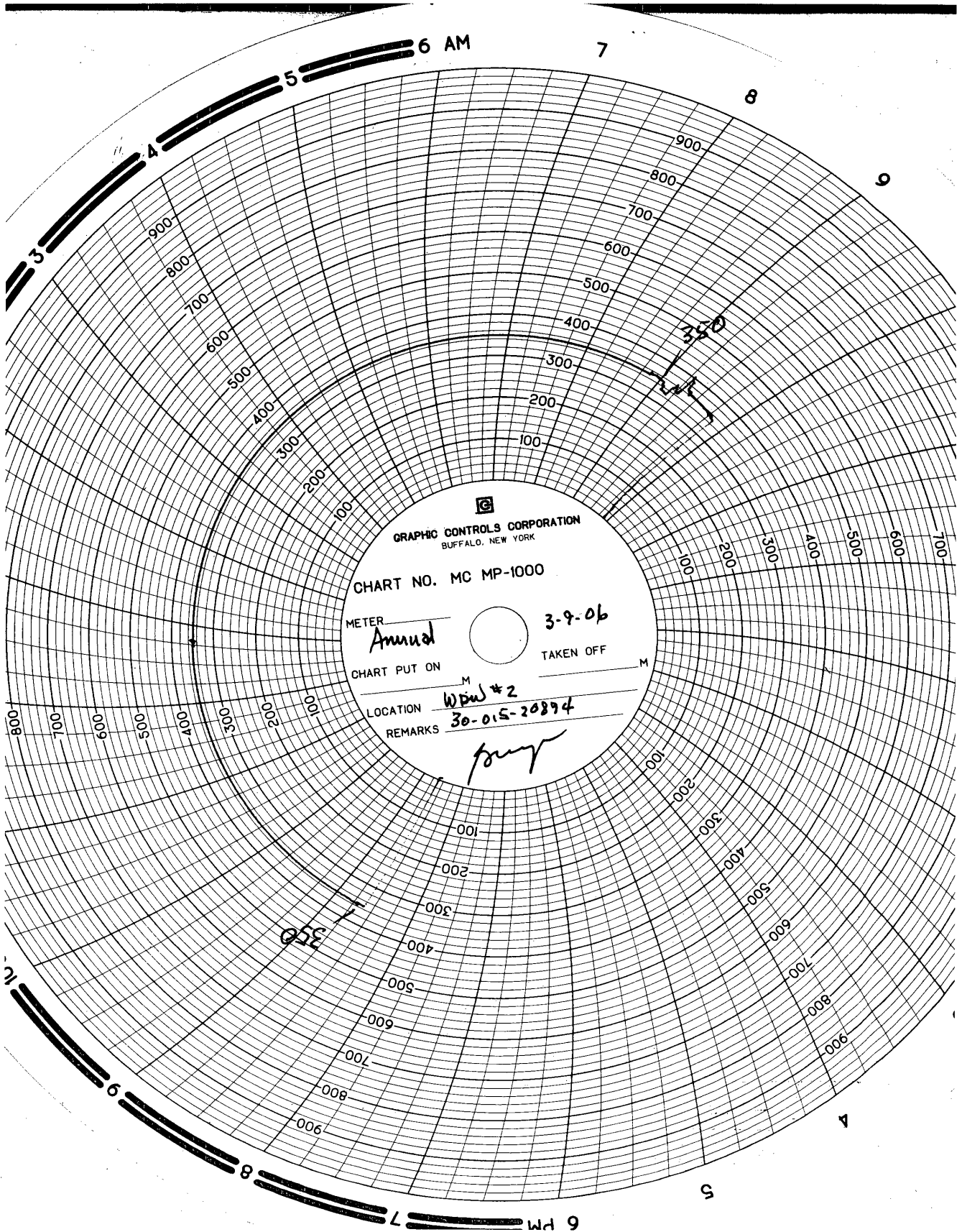
RECEIVED
1999 JUL 21 A 10:23
BUREAU OF LAND MGMT
LAND RESOURCE AREA

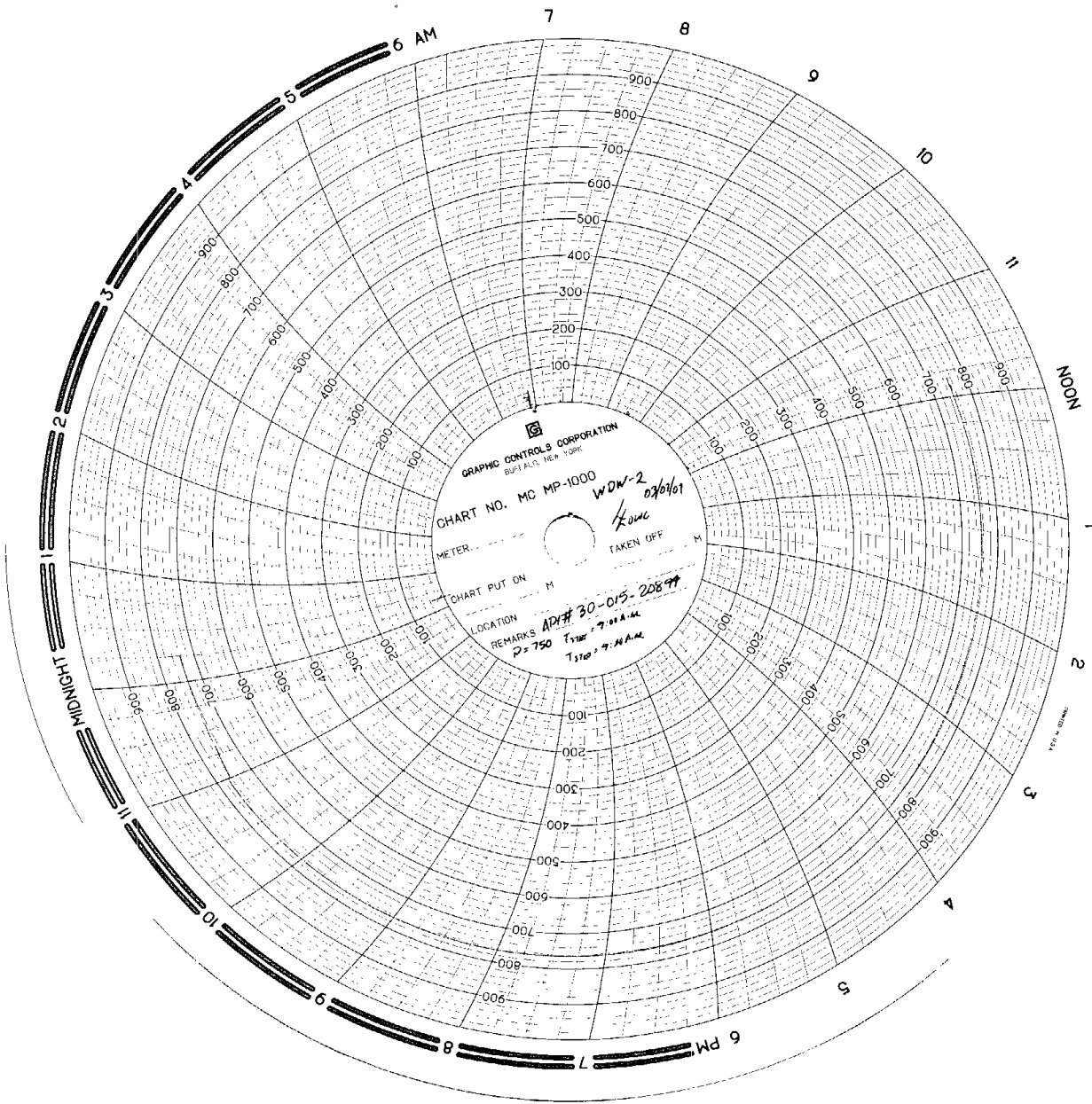
An Independent Refinery Serving . . .
NEW MEXICO • ARIZONA • WEST TEXAS • NORTHERN MEXICO

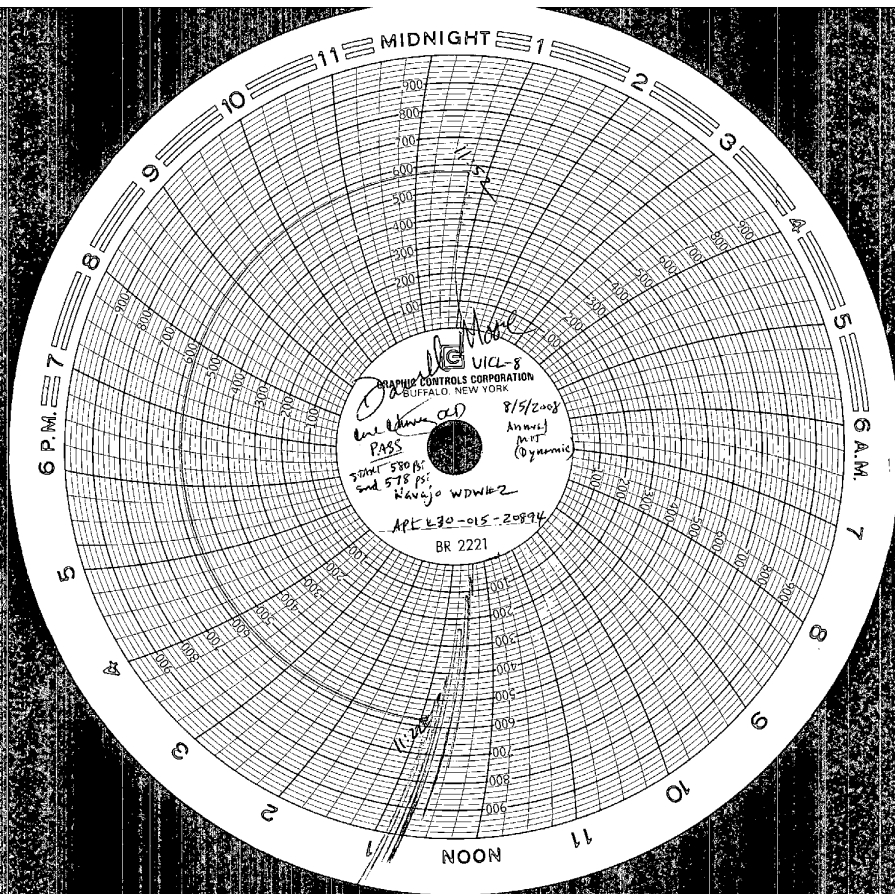


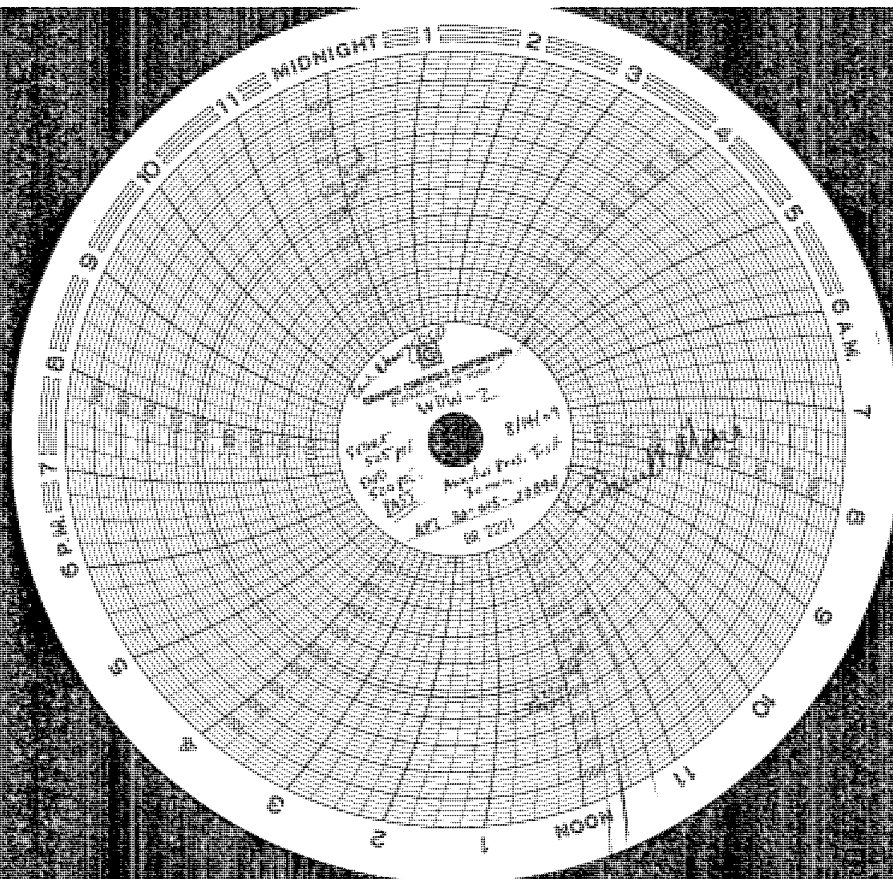


RECEIVED
APR 15 2004
OGB-ARTESIA









Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, August 12, 2010 1:55 PM
To: 'Moore, Darrell'; Dade, Randy, EMNRD
Cc: Lackey, Johnny
Subject: RE: Mechanical Integrity Tests

Darrell:

OCD confirms that the annual MITs performed on WDW-1 (UICI-8) and WDW-2 (UICI-8-1) passed.

Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Moore, Darrell [<mailto:Darrell.Moore@hollycorp.com>]
Sent: Thursday, August 12, 2010 10:39 AM
To: Chavez, Carl J, EMNRD; Dade, Randy, EMNRD
Cc: Lackey, Johnny
Subject: MIT's

Carl

Attached, please find the charts for the MIT's that were performed on our Injection wells WDW-1 and WDW-2 today. Both wells passed the Mechanical Integrity Tests with no drop off in pressure. As you know, the MIT on WDW-3 was performed earlier in the year and was submitted to OCD. In addition, there was no pressure on either of the well's bradenhead. If there are any questions concerning this submission, please call me or email me. Thank you.

Darrell Moore
Environmental Manager for Water and Waste
Navajo Refining Company, LLC
Phone Number 575-746-5281
Cell Number 575-703-5058
Fax Number 575-746-5451

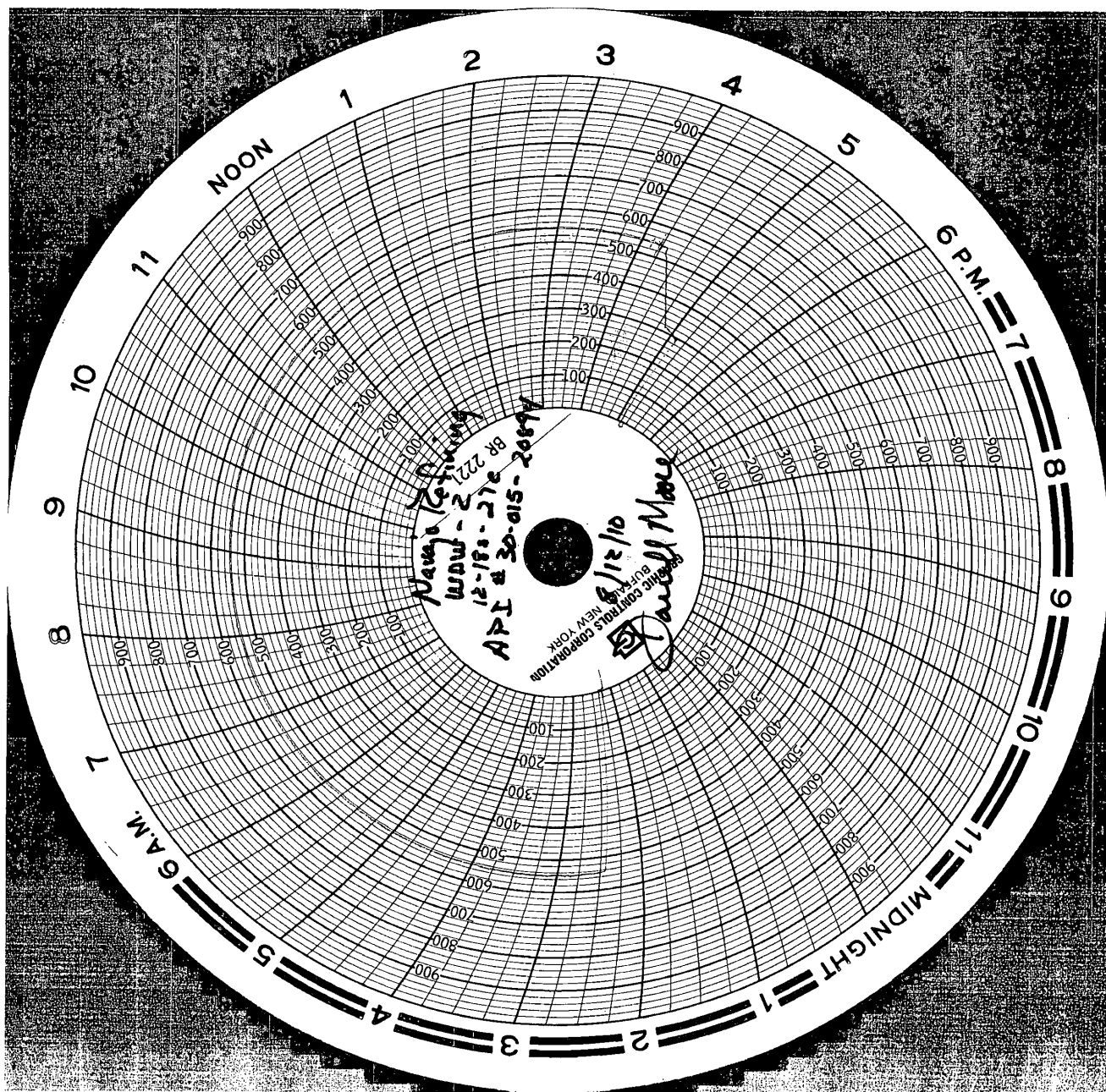
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Chavez, Carl J, EMNRD

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Sent: Thursday, August 12, 2010 1:55 PM
To: 'Moore, Darrell'; Dade, Randy, EMNRD
Cc: Lackey, Johnny
Subject: RE: Mechanical Integrity Tests

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Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/index.htm>
(Pollution Prevention Guidance is under "Publications")

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

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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

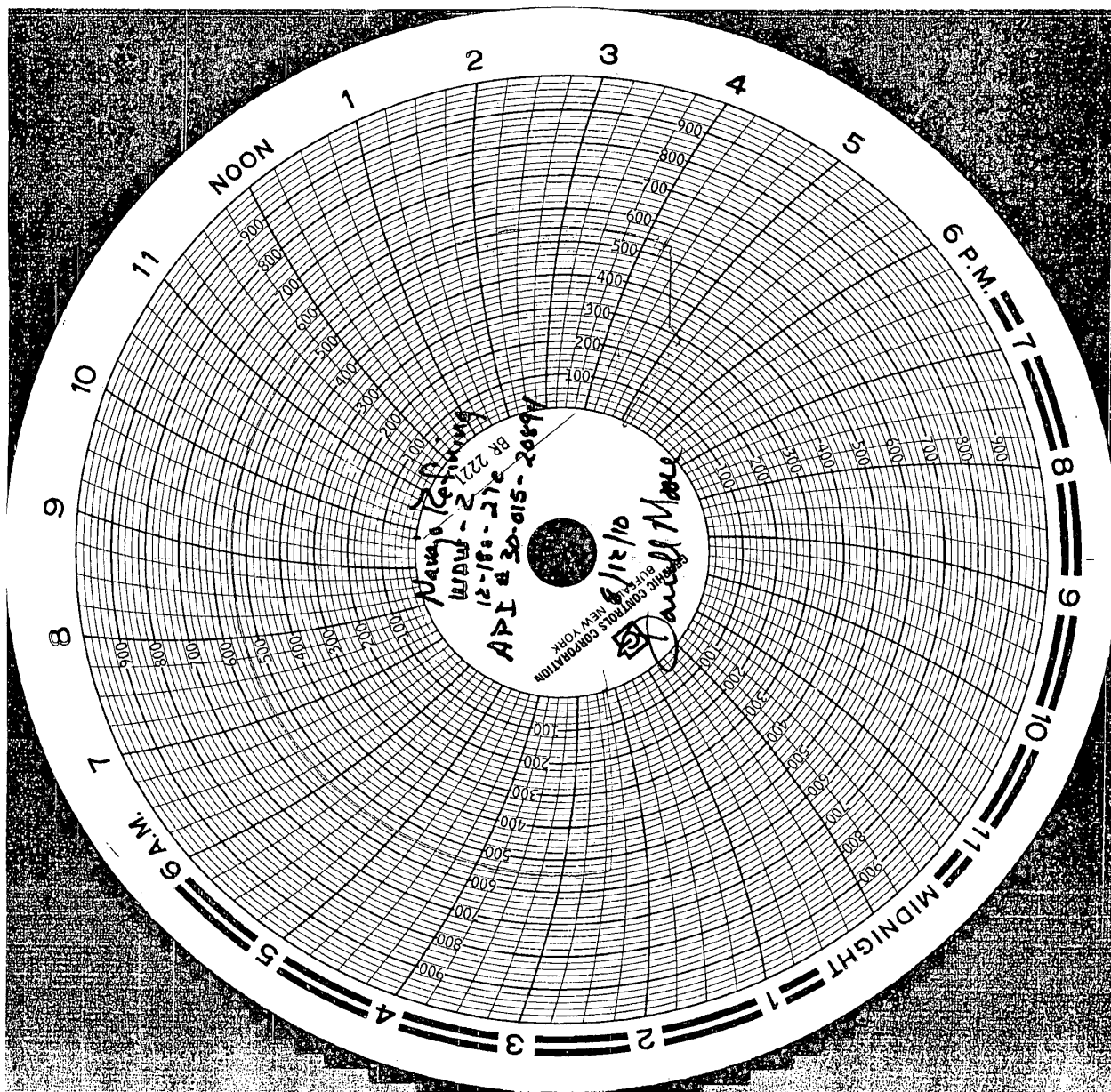
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District I - (575) 393-6161
1625 N French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)		WELL API NO. 30-015-20894
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other Injection Well		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Navajo Refining Company		6. State Oil & Gas Lease No. 6852
3. Address of Operator Post Office Box 159, Artesia, New Mexico 88211		7. Lease Name or Unit Agreement Name Chukka WDW-2
4. Well Location Unit Letter E : 1980 feet from the North line and 660 feet from the West line Section 12 Township 18S Range 27E NMPM County Eddy		8. Well Number WDW-2
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3607' GL, 3623' RKB		9. OGRID Number
10. Pool name or Wildcat: Navajo Permo-Penn 96918		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/> DOWNHOLE COMMINGLE <input type="checkbox"/>	SUBSEQUENT REPORT OF: REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/> CASING/CEMENT JOB <input type="checkbox"/>
OTHER: PERFORM PRESSURE FALLOFF TEST, ANNULUS PRESSURE TEST <input checked="" type="checkbox"/>	OTHER: <input type="checkbox"/>

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

October 17, 2011 - Perform an annulus pressure test with an initial pressure of 600 psig and run the test for 30 minutes. Install bottomhole gauges into WDW-1, WDW-2, and WDW-3 by 11:45am. Continue injection into all three wells.

October 18, 2011 - Continue injection into all three wells.

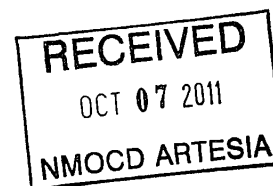
October 19, 2011 - At 12:15pm, the offset wells WDW-1 and WDW-3 will be shut-in. A constant injection rate will be established for WDW-2 and continue for a 30 hour injection period. Do not exceed 1000 psig wellhead pressure.

October 20, 2011 - At 7:00pm, WDW-2 will be shut in for a 30-hour falloff period. WDW-1 and WDW-3 will remain shut-in.

October 21, 2011 - All three wells will continue to be shut in while monitoring falloff pressure in all three wells.

October 22, 2011 - At 7:00am, acquire downhole pressure gauges from all three wells. Tag bottom of fill and come out of hole very slowly, making 7-minute gradient stops while coming out of the WDW-2 every 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 ft, 3000 ft, 2000 ft, 1000 ft, surface). Run in hole with a temperature tool and conduct temperature survey from the surface to the top of the fill. Turn the wells back to Navajo personnel.

Accepted for record
10/11/11
NMOCD



Spud Date:

Rig Release Date:

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

SIGNATURE Timothy Jones TITLE Project Engineer DATE 10/3/2011
Type or print name Timothy Jones E-mail address: jjones@subsurfacegroup.com PHONE: 713-880-4640
For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____
Conditions of Approval (if any):

Submit 1 Copy To Appropriate District
Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised August 1, 2011

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-015-20894	
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No. 6852	
7. Lease Name or Unit Agreement Name Chukka WDW-2	
8. Well Number WDW-2	
9. OGRID Number	
10. Pool name or Wildcat: Navajo Permo-Penn 96918	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Injection Well	
2. Name of Operator Navajo Refining Company	
3. Address of Operator Post Office Box 159, Artesia, New Mexico 88211	
4. Well Location Unit Letter E : 1980 feet from the North line and 660 feet from the West line Section 12 Township 18S Range 27E NMPM County Eddy	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3607' GL, 3623' RKB	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
OTHER: PERFORM PRESSURE FALLOFF TEST, ANNULUS PRESSURE TEST <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

October 17, 2011 - Perform an annulus pressure test with an initial pressure of 600 psig and run the test for 30 minutes. Install bottomhole gauges into WDW-1, WDW-2, and WDW-3 by 11:45am. Continue injection into all three wells.

October 18, 2011 - Continue injection into all three wells.

October 19, 2011 - At 12:15pm, the offset wells WDW-1 and WDW-3 will be shut-in. A constant injection rate will be established for WDW-2 and continue for a 30 hour injection period. Do not exceed 1000 psig wellhead pressure.

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Spud Date:

Rig Release Date:

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

SIGNATURE Timothy Jones TITLE Project Engineer DATE 10/3/2011
Type or print name Timothy Jones E-mail address: jjones@subsurfacegroup.com PHONE: 713-880-4640
For State Use Only

APPROVED BY: Carl J. Chavez TITLE Environmental Engineer DATE 10/19/2011
Conditions of Approval (if any): See E-mail conditions dated 10/19/2011 attached to WDW-1.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, October 19, 2011 4:06 PM
To: 'Moore, Darrell'
Cc: Sanchez, Daniel J., EMNRD; VonGonten, Glenn, EMNRD; Dade, Randy, EMNRD
Subject: Navajo Refining Company UIC Class I (NH) Injection Wells WDWs 1, 2 & 3 (UICI-008) Fall Off Test Plan (August 2011)

Darrell:

The New Mexico Oil Conservation Division (OCD) is in receipt of your above subject test plan. OCD has already approved the Fall-Off Test (FOT) Plan with conditions on July 28, 2009. The OCD notes that it is also in the process of reviewing C-103s Sundry Notices for the upcoming FOTs.

OCD observes some changes in this FOT Plan submittal that are not acceptable to the OCD. For example, Exhibit 1 is not an acceptable exhibit to the OCD for reasons specified in the 2010 FOT report review and later during the May 2011 meeting in Santa Fe. However, the operator continues to submit exhibits with certain assumptions that have not been accepted or approved by the OCD; i.e., that the injection wells are show interconnection with the injection zone during past FOTs. Perhaps the operator can conduct the 2011 FOT with the information and exhibits needed to prove the interconnection of injection wells with the injection zone? The Certified PE should provide the exhibits in the 2011 FOT Report with the analysis and conclusions supporting any claims for the OCD to review and consider before approving. This is apparently a FOT frequency per well issue that the operator is attempting to prove.

The OCD provides the following comments, observations, and/or recommendations on the above subject plan below.

Comments:

- The OCD approved the original Fall-Off Test (FOT) Plan based on OCD Guidance dated December 3, 2007. There should not be any significant changes to this FOT Plan because it is flexible where needed to allow operators to implement it on each injection well.
- OCD likes to be notified to witness the installation of bottom hole gauges and to be present at least one hour before injection shut-off and commencement of FOT monitoring.
- OCD is concerned about the Section VI No. 1(e) WDW-3 Cement Bond Log quality being poor from 900 ft. to 1200 ft- especially at the depths: 2662 – 2160; 4876 – 5372; and 6750 – 7600 ft. micro annulus scenario.

Observations:

- Section V No. 2: The objective of the FOT is NOT to achieve or limit a 100 psig pressure differential before vs. after FOT injection vs. shut-off, but it is a minimum pressure differential that OCD stipulates in its guidance for a successful FOT and injection zone that may still continue to be utilized for disposal, i.e., not too pressured up and subject to continued fracturing under daily allowed maximum surface injection pressure operational limits.
- Section V No. 7 and Exhibit 1: OCD observes a bottom hole pressure chart for WDWs 1, 2 and 3 at 7660 feet that the operator presented in the 2010 FOT and again during a May 2011 meeting in Santa Fe, New Mexico to show the interconnection between injection wells and the injection formation. The OCD had commented that there was no explanation or conclusion provided from the Certified PE who conducted and completed the 2010 FOT report that supports the operator's claim that all injection wells are interconnected based on Exhibit 1.

Furthermore, the OCD requested a statement or information supporting the operator's claim by the Certified PE, but never received one. At the meeting, the OCD explained that based on Exhibit 1, there was no support for the claim. In order to make the interconnection determination, during each FOT at each well and off-set injection wells (WDWs not being FOT'd) before and throughout the FOT would need bottom hole pressures monitored in tandem at each well location to establish the interconnectivity of the injection wells with the receiving injection formation under a uniform time scale. This would be a chart that could be plotted that would show during the test the interconnectivity of the wells for each FOT. The OCD doubts that the operator can make the case for interconnectivity between injection wells and injection formation because of the significant distance between the injection wells and fact that sedimentation in formation varies laterally and uniformity in sedimentation, saturated porosity and permeability due to variation in sedimentation would by chance make the injection formation aerially extensive and uniform over a 3 to 5 mile radius from each injection well. Also, even if by chance there was

uniformity over the mileage specified, the distance between injection wells and corresponding pressure would likely not be observed.

- Exhibit 6: OCD observes in Section B a proposed MIT once every 5 years. OCD's UIC Program requires annual MITs and/or after down hole work is performed on a well.

Recommendations:

- Operator is running survey logs to the bottom of fill or below USDW (fresh water) zones, which excludes an evaluation of casing in the fresh water zone. Please run logs up to surface.
- Be sure to also record and provide injection flow rate and pressure leading up to shut-off and monitoring throughout the FOT monitoring period. OCD needs to confirm that a pseudo steady-state condition was achieved before shut-off. This data is also needed for software modeling of the FOT.
- Please provide electronic data from the FOTs at each well in order for the OCD to run its software model to confirm the results in the report.
- Section V No. 13: Surface pressure monitoring and Horner Plot during injection should be used to confirm radial flow condition is achieved instead of waiting a set period if operator wishes to reduce the injection period.

Disclaimer: *Please be advised that OCD has already approved with conditions Navajo Refining Company's Fall-Off Test (FOT) Plan on July 28, 2009, and is not providing approval of this FOT Plan; however, comments, observations and recommendations herein should help Navajo Refining Company understand the OCD's concerns based on the submittal.*

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462

E-mail: CarlJ.Chavez@state.nm.us

Website: <http://www.emnrd.state.nm.us/ocd/>

"Why not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward with the Rest of the Nation?" To see how, go to "Pollution Prevention & Waste Minimization" at:
<http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental>)

Submit 1 Copy To Appropriate District Office

District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised August 1, 2011

WELL API NO. 30-015-20894
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name BLM
8. Well Number WDW-2
9. OGRID Number
10. Pool name or Wildcat Lwr Wolfcamp-Cisco-Canyon Inj. Zone

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other (Class 1 NH Injection Well)

2. Name of Operator
Navajo Refining Company L.L.C.

3. Address of Operator
501 East Main Street, Artesia, NM

4. Well Location

Unit Letter: 1980 feet from the North line and 660 feet from the West line

Section 12 Township 18 S Range 27 E NMPM County Eddy

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
GL: 3,607 feet, RKB: 3,6223 feet

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☒ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Navajo proposes to add perforations in the existing injection interval at 7800 feet - 7830 feet, 8050 feet - 8290 feet. These perforations would be added in the existing, approved, injection interval in Chukka WDW-2.

NOTE: Work is proposed to be performed in July 2013.

Spud Date:

Rig Release Date:

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

SIGNATURE

Timothy Jones

TITLE Project Engineer

DATE 6-13-2013

Type or print name Timothy Jones

E-mail address: tjones@subsurfacegroup.com

PHONE: 713-880-4640

For State Use Only

APPROVED BY:

Carol Chavez

TITLE Environmental Engineer

DATE 6/18/2013

Conditions of Approval (if any):

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised August 1, 2011

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-20894
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other (Class 1 NH Injection Well) <input type="checkbox"/>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Navajo Refining Company L.L.C.		6. State Oil & Gas Lease No.
3. Address of Operator 501 East Main Street, Artesia, NM		7. Lease Name or Unit Agreement Name BLM
4. Well Location Unit Letter: 1980 feet from the North line and 660 feet from the West line Section 12 Township 18 S Range 27 E NMPM County Eddy		8. Well Number WDW-2
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GL: 3,607 feet, RKB: 3,6223 feet		9. OGRID Number
		10. Pool name or Wildcat Lwr Wolfcamp-Cisco-Canyon Inj. Zone

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:
PERFORM REMEDIAL WORK ☒ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:
REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

A caliper survey will be conducted on the 3-1/2-inch injection tubing. The caliper survey is scheduled to be performed on June 19, 2013.

Navajo will conduct an acid stimulation of the injection interval in the WDW-2 to increase injectivity into the permitted injection zone. The stimulation fluid will consist of 20,244 gallons of 15% HCl acid injected into the perforated interval of 7,270 to 8,894 feet RKB. The acid will be injected into the well using coil tubing equipment.

NOTE: Work is expected to be performed in June and July 2013.

Spud Date:

Rig Release Date:

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

SIGNATURE Timothy Jones TITLE Project Engineer DATE 6-13-2013

Type or print name Timothy Jones E-mail address: tjones@subsurfacegroup.com
PHONE: 713-880-4640

For State Use Only

APPROVED BY: Corey Chisley TITLE Environmental Engineer DATE 6/18/2013
Conditions of Approval (if any):

SUBSURFACE

NAVAJO REFINING COMPANY

Map ID No. 35

Artificial Penetration Review

OPERATOR Yates Petroleum Co.

STATUS New Gas

LEASE Violet Blv State Com

LOCATION Sec. 14 -T18S-R27E

WELL NUMBER 1

MUD FILLED BOREHOLE NA

DRILLED NA

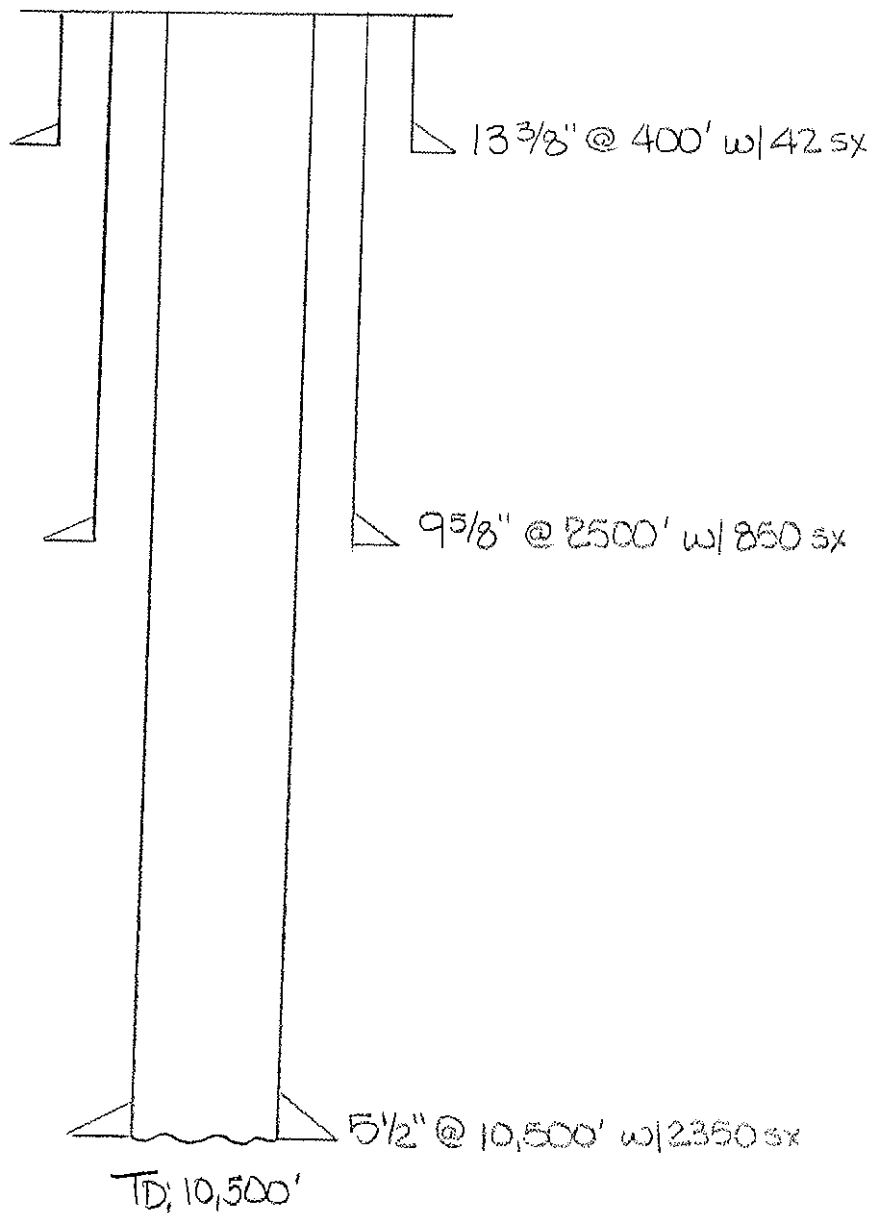
TOP OF INJECTION ZONE NA

PLUGGED NA

API NO. 30-015- 40187

REMARKS: Not yet drilled. Proposed 10,500'

Proposed Casing



District I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720

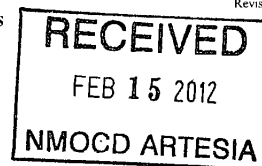
District II
811 S. First St., Artesia, NM 88210
Phone (575) 748-1283 Fax (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

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

Form C-101
Revised December 16, 2011



Permit

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210		² OGRID Number 025575
		³ API Number 30-015-40187
⁴ Property Code 35452	⁵ Property Name Violet BIV State Com	
		⁶ Well No. 1

⁷ Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
A	14	18S	27E	A	660	North	990	East	Eddy

⁸ Pool Information

Wildcat Chester	97825
-----------------	-------

Additional Well Information

⁹ Work Type N	¹⁰ Well Type G	¹¹ Cable/Rotary Rotary	¹² Lease Type State	¹³ Ground Level Elevation 3540' GL
¹⁴ Multiple N	¹⁵ Proposed Depth 10,500	¹⁶ Formation Chester	¹⁷ Contractor Not Determined	¹⁸ Spud Date ASAP
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

¹⁹ Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
New	17.5	13.375	48#	400'	425	0
New	12.25	9.625	36#	2500'	850	0
New	8.75	5.5	15.5#	10500'	2350	0

Casing/Cement Program: Additional Comments

--

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000#	5000#	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief		OIL CONSERVATION DIVISION	
I further certify that the drilling pit will be constructed according to NMOCD guidelines <input type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input checked="" type="checkbox"/>		Approved By: <i>T. C. Shepard</i>	
Signature: <i>Cy Cowan</i>		Title: <i>Geologist</i>	
Printed name: Cy Cowan		Approved Date: <i>4/18/2012</i> Expiration Date: <i>4/18/2014</i>	
Title: Land Regulatory Agent			
E-mail Address: cy@yatespetroleum.com			
Date: 02/14/2012	Phone: 575-748-4372	Conditions of Approval Attached	

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

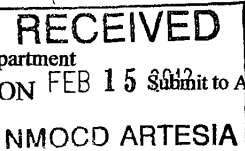
District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505



Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT
WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-40187	² Pool Code 97825	³ Pool Name WILDCAT, CHESTER
⁴ Property Code 35452	⁵ Property Name VIOLET BIV STATE COM	⁶ Well Number 1
⁷ OGRID No. 025575	⁸ Operator Name YATES PETROLEUM CORPORATION	⁹ Elevation 3540

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	14	18-S	27-E		660	NORTH	990	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acre 320 E2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶ 	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature Date 02/14/12 Cy Cowan Printed Name	
	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. FEBRUARY 6, 2006 Date of Survey Signature and Seal of Professional Surveyor: 	
	DAN R. REDDY, NM REG. #5412 PROFESSIONAL SURVEYOR	

SUBSURFACE

NAVAJO REFINING COMPANY

Map ID No. 36

Artificial Penetration Review

OPERATOR Yates Petroleum Co.LEASE Violet BIV State ComWELL NUMBER 1CDRILLED NAPLUGGED NASTATUS Cancelled AppLOCATION Sec. 14 -T18S-R27EMUD FILLED BOREHOLE NATOP OF INJECTION ZONE NAAPI NO. 30-015- 36939

REMARKS:

Proposed TD: 10,500'

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

FEB 13 2009

Form C-101
June 16, 2001

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

Submit to appropriate District Office

☐ AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN,
PLUGBACK, OR ADD A ZONE**

Operator Name and Address Yates Petroleum Corporation 105 S 4 th Street Artesia, NM 88210		² OGRID Number 025575
		³ API Number 30-015-36939
³ Property Code 34452 35452	⁵ Property Name Violet BIV State Com	⁶ Well No 1
⁹ Proposed Pool 1 Chester		¹⁰ Proposed Pool 2

Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	14	18S	27E	A	660'	North	990'	East	Eddy

Proposed Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information

¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3540'
¹⁶ Multiple N	¹⁷ Proposed Depth 10,500'	¹⁸ Formation Chester	¹⁹ Contractor Not Determined	²⁰ Spud Date ASAP

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17.12	13 375	48#	400'	425 sx	0
12 25	9 625	36#	2500'	850 sx	0
8 75	5.5	15 5#	10500	2350 sx	0

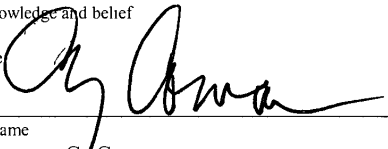
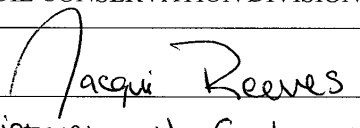
²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Yates Petroleum Corporation proposes to drill and test the Chester/intermediate formations. Approximately 400' of surface casing will be set and cement circulated. Intermediate casing will be set at 2500', cement circulated to surface. If commercial, production casing will be run, can be cemented, perforated and stimulated as need to gain production.

MUD PROGRAM: 0-400' FW Gel; 400'-2500' Brine Water, 2500'-9600' Cut Brine; 9600'-10500' Salt Gel/Starch/ 4-6%KCL

BOPE PROGRAM: a 5000# BOPE will be installed on the 9.625" casing and tested daily for operational..

Sources at YPC have relayed information to me that they believe there will not be enough H2S found from the surface to the Chester formation to meet the OCD's minimum requirements for the submission of a contingency plan per Rule 118.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature 		Approved by 	
Printed name Cy Cowan		Title District 11 Geologist	
Title Regulatory Agent		Approval Date 2/23/09	Expiration Date 2/23/2011
E-mail Address cy@yatespetroleum.com			
Date February 6, 2009	Phone (575) 748-4372	Conditions of Approval Attached <input type="checkbox"/>	



District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-36939		² Pool Code		³ Pool Name Chester WildCat	
⁴ Property Code 35452		⁵ Property Name Violet BIV State Com			⁶ Well Number 1
⁷ OGRID No. 025575		⁸ Operator Name Yates Petroleum Corporation			⁹ Elevation 3540'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	14	18S	27E		660'	North	990'	East	Eddy

¹¹ Bottom Hole Location if Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------	--------

¹² Dedicated Acres 320 EA	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
---	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶ 	¹⁷ OPERATOR CERTIFICATION	
	<i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>	
	Signature 	Date 1/17/08
	Cy Cowan, Regulatory Agent Printed Name	
¹⁸ SURVEYOR CERTIFICATION <i>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.</i>	Date of Survey Signature and Seal of Professional Surveyor	
	REFER TO ORIGINAL PLAT	
	Certificate Number	

District I
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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-	² Pool Code	³ Pool Name
⁴ Property Code 35452	⁵ Property Name VIOLET BIV STATE COM	
⁶ OGRID No. 25575	⁷ Operator Name YATES PETROLEUM CORPORATION	⁸ Well Number 1
		⁹ Elevation 3540

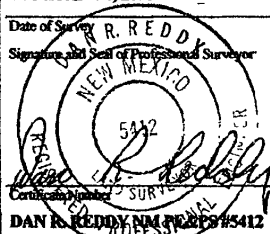
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	14	18-S	27-E		660	NORTH	990	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acre		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

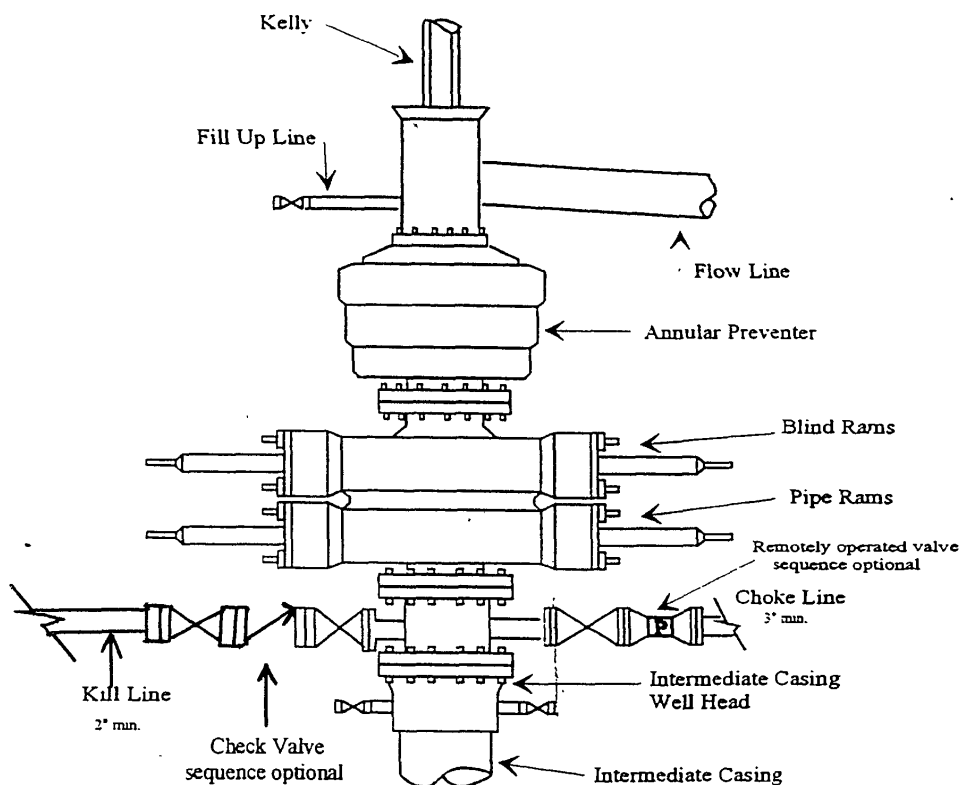
¹⁶				990' LAT N32.75293 LON W104.24397	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>Walter L. Callahan</i> Date: _____ Printed Name: <i>Walter L. Callahan</i>
					¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. FEBRUARY 6, 2006 Date of Survey: _____ Signature and Seal of Professional Surveyor:  DAN R. REDDY NM PEPS #5412



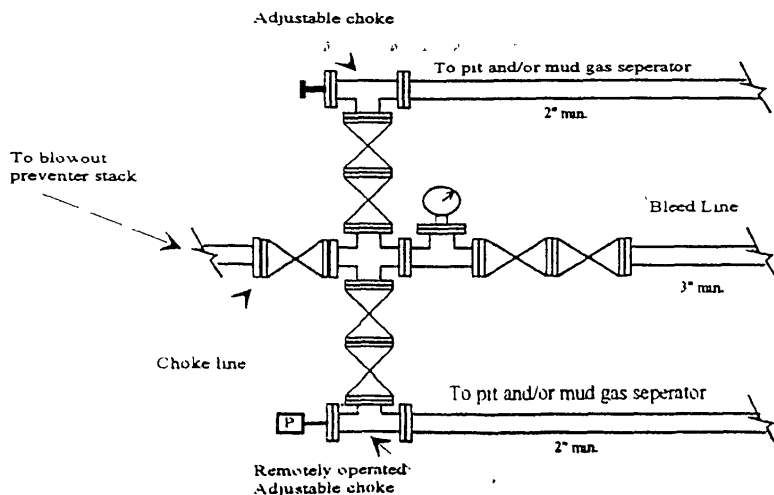
Yates Petroleum Corporation

BOP-4

Typical 5,000 psi Pressure System Schematic Annular with Double Ram Preventer Stack



Typical 5,000 psi choke manifold assembly with at least these minimum features



District I
1623 N French Dr., Hobbs, NM 88240
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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 NMOC District Office.

Closed-Loop System Permit or Closure Plan Application

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Type of action: ☒ Permit ☐ Closure

Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances

1. Operator: <u>Yates Petroleum Corporation</u> OGRID #: <u>025575</u>	
Address: <u>105 South Fourth Street, Artesia, New Mexico 88210</u>	
Facility or well name: <u>Violet BIV State Com #1</u> <u>30-015-36939</u>	
API Number: <u>30-015-34632</u> OCD Permit Number: _____	
U/L or Qtr/Qtr <u>A</u> Section <u>14</u> Township <u>18S</u> Range <u>27E</u> County: <u>Eddy</u>	
Center of Proposed Design: Latitude <u>N32.75293</u> Longitude <u>W104.24397</u> NAD: <input checked="" type="checkbox"/> 1927 <input type="checkbox"/> 1983	
Surface Owner: <input type="checkbox"/> Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Tribal Trust or Indian Allotment	
2. <input checked="" type="checkbox"/> Closed-loop System: Subsection H of 19.15.17.11 NMAC Operation: <input checked="" type="checkbox"/> Drilling a new well <input type="checkbox"/> Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) <input type="checkbox"/> P&A <input type="checkbox"/> Above Ground Steel Tanks or <input checked="" type="checkbox"/> Haul-off Bins	
3. Signs: Subsection C of 19.15.17.11 NMAC <input type="checkbox"/> 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers <input checked="" type="checkbox"/> Signed in compliance with 19.15.3.103 NMAC	
4. Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. <input checked="" type="checkbox"/> Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC <input checked="" type="checkbox"/> Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC <input checked="" type="checkbox"/> Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC <input type="checkbox"/> Previously Approved Design (attach copy of design) API Number: _____ <input type="checkbox"/> Previously Approved Operating and Maintenance Plan API Number: _____	
5. Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC) Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required. Disposal Facility Name: <u>Gandy Marley</u> Disposal Facility Permit Number: <u>NM-01-0019</u> Disposal Facility Name: <u>CRI</u> Disposal Facility Permit Number: <u>R-9166</u> Disposal Facility Name: <u>Lea Land</u> Disposal Facility Permit Number: <u>NM-1-035</u> Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations? <input type="checkbox"/> Yes (If yes, please provide the information below) <input checked="" type="checkbox"/> No Required for impacted areas which will not be used for future service and operations. <input type="checkbox"/> Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC <input type="checkbox"/> Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC <input type="checkbox"/> Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	

0209130

6. Operator Application Certification: I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief. Name (Print): <u>Cy Crovan</u> Title: <u>Regulatory Agent</u> Signature: <u>[Signature]</u> Date: <u>2/6/09</u> e-mail address: <u>cy@yatespetroleum.com</u> Telephone: <u>575-748-4372</u>	
7. OCD Approval: <input checked="" type="checkbox"/> Permit Application (including closure plan) <input type="checkbox"/> Closure Plan (only) OCD Representative Signature: <u>[Signature]</u> Approval Date: <u>02-24-09</u> Title: <u>District 11 Geologist</u> OCD Permit Number: <u>0209130</u>	
8. Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC <i>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.</i> <input type="checkbox"/> 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: <i>Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.</i> 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? <input type="checkbox"/> Yes (If yes, please demonstrate compliance to the items below) <input type="checkbox"/> No <i>Required for impacted areas which will not be used for future service and operations:</i> <input type="checkbox"/> Site Reclamation (Photo Documentation) <input type="checkbox"/> Soil Backfilling and Cover Installation <input type="checkbox"/> Re-vegetation Application Rates and Seeding Technique	
10. Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan. Name (Print): _____ Title: _____ Signature: _____ Date: _____ e-mail address: _____ Telephone: _____	

Yates Petroleum Corporation
Closed Loop System

Equipment Design Plan

Closed Loop System will consist of:

1 – double panel shale shaker

1 – (minimum) Centrifuge, certain wells and flow rates may require 2 centrifuges

On certain wells, the Centrifuge will be replaced by a Clackco Settling Tank System

1 – minimum centrifugal pump to transfer fluids

2- 500 bbl. FW Tanks

1 – 500 bbl. BW Tank

1 – half round frac tank – 250 bbl. capacity as necessary to catch cement / excess mud returns generated during a cement job.

1 Set of rail cars / catch bins

Certain wells will use an ASC Auger Tank

Operation Plan

All equipment will be inspected at least hourly by rig personnel and daily by contractors personnel.

Any spills / leaks will be reported to YPC, NMOCD, and cleaned up without delay.

Closure Plan

Drilling with Closed Loop System, haul off bins will be taken to Gandy Marley, CRI and Lea Land Farm.

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
June 16, 2008

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	7. Lease Name or Unit Agreement Name Violet BIV State Com
2. Name of Operator Yates Petroleum Corporation	8. Well Number 1
3. Address of Operator 105 S. 4 th Street, Artesia, New Mexico 88210	9. OGRID Number 25575
4. Well Location Unit Letter <u>A</u> <u>660</u> feet from the <u>North</u> line and <u>990</u> feet from the <u>East</u> line Section <u>14</u> Township <u>18S</u> Range <u>27E</u> NMPM County <u>Eddy</u>	10. Pool name or Wildcat Chester
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3540' GR	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>
OTHER: <input type="checkbox"/>	OTHER: <input checked="" type="checkbox"/> Extend APD

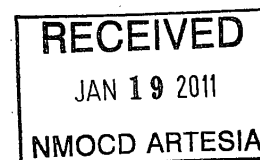
13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Yates Petroleum Corporation wishes to extend the Application for Permit to Drill for ~~two~~ ^{one} years until February 23, 201~~8~~ ².

Thank you,

Current NMOCD rules and regulations must be met at time of drilling

Final Extension
APPROVED FOR 1 YEAR
EXPIRES: 2/23/2012



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

SIGNATURE Monti Sanders TITLE Land Regulatory Technician DATE January 14, 2011
Type or print name Monti Sanders E-mail address montis@yatespetroleum.com PHONE: (575) 748-4244
For State Use Only
APPROVED BY: David Gray TITLE Field Supervisor DATE 1-26-11
Conditions of Approval (if any):

District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
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1000 Rio Brazos Road, Aztec, NM 87410
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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 NMOC District Office.

Closed-Loop System Permit or Closure Plan Application

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Type of action: ☒ Permit ☐ Closure

Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1. Operator: <u>Yates Petroleum Corporation</u>		OGRID #: <u>025575</u>
Address: <u>105 South Fourth Street, Artesia, New Mexico 88210</u>		
Facility or well name: <u>Violet BIV State Com #1</u> <u>30-015-36939</u>		
API Number: <u>30-015-36939</u> OGD Permit Number: <u>209130</u>		
U/L or Qtr/Qtr <u>A</u> Section <u>14</u> Township <u>18S</u> Range <u>27E</u> County: <u>Eddy</u>		
Center of Proposed Design: Latitude <u>N32.75293</u> Longitude <u>W104.24397</u> NAD: <input checked="" type="checkbox"/> 1927 <input type="checkbox"/> 1983		
Surface Owner: <input type="checkbox"/> Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Tribal Trust or Indian Allotment		

RECEIVED
FEB 15 2012
NMOC DISTRICT OFFICE

2. <input checked="" type="checkbox"/> Closed-loop System: Subsection H of 19.15.17.11 NMAC
Operation: <input checked="" type="checkbox"/> Drilling a new well <input type="checkbox"/> Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) <input type="checkbox"/> P&A
<input type="checkbox"/> Above Ground Steel Tanks or <input checked="" type="checkbox"/> Haul-off Bins

3. Signs: Subsection C of 19.15.17.11 NMAC
<input type="checkbox"/> 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
<input checked="" type="checkbox"/> Signed in compliance with 19.15.3.103 NMAC

4. Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.
<input checked="" type="checkbox"/> Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
<input checked="" type="checkbox"/> Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
<input checked="" type="checkbox"/> Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
<input type="checkbox"/> Previously Approved Design (attach copy of design) API Number: _____
<input type="checkbox"/> Previously Approved Operating and Maintenance Plan API Number: _____

5. Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)
Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.
Disposal Facility Name: <u>Gandy Marley</u> Disposal Facility Permit Number: <u>NM-01-0019</u>
Disposal Facility Name: <u>CRI</u> Disposal Facility Permit Number: <u>R-9166</u>
Disposal Facility Name: <u>Lea Land</u> Disposal Facility Permit Number: <u>NM-1-035</u>

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☒ No

Required for impacted areas which will not be used for future service and operations.

- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

0209130

6. **Operator Application Certification:**
 I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.
 Name (Print): Cy Cowan Title: Regulatory Agent
 Signature: [Signature] Date: 2/6/09
 e-mail address: cy@vatespetroleum.com Telephone: 575-748-4372

7. **OCD Approval:** ☒ Permit Application (including closure plan) ☐ Closure Plan (only)
 OCD Representative Signature: [Signature] Approval Date: 02-24-09
 Title: District II Geologist OCD Permit Number: 0209130

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 identify 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) ☐ No
Required for impacted areas which will not be used for future service and operations:
☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

10. **Operator Closure Certification:**
 I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
 Name (Print): _____ Title: _____
 Signature: _____ Date: _____
 e-mail address: _____ Telephone: _____

Yates Petroleum Corporation Closed Loop System

Equipment Design Plan

Closed Loop System will consist of:

1 – double panel shale shaker

1 – (minimum) Centrifuge, certain wells and flow rates may require 2 centrifuges

On certain wells, the Centrifuge will be replaced by a Clackco Settling Tank System

1 – minimum centrifugal pump to transfer fluids

2- 500 bbl. FW Tanks

1 – 500 bbl. BW Tank

1 – half round frac tank – 250 bbl. capacity as necessary to catch cement / excess mud returns generated during a cement job.

1 Set of rail cars / catch bins

Certain wells will use an ASC Auger Tank

Operation Plan

All equipment will be inspected at least hourly by rig personnel and daily by contractors personnel.

Any spills / leaks will be reported to YPC, NMOCD, and cleaned up without delay.

Closure Plan

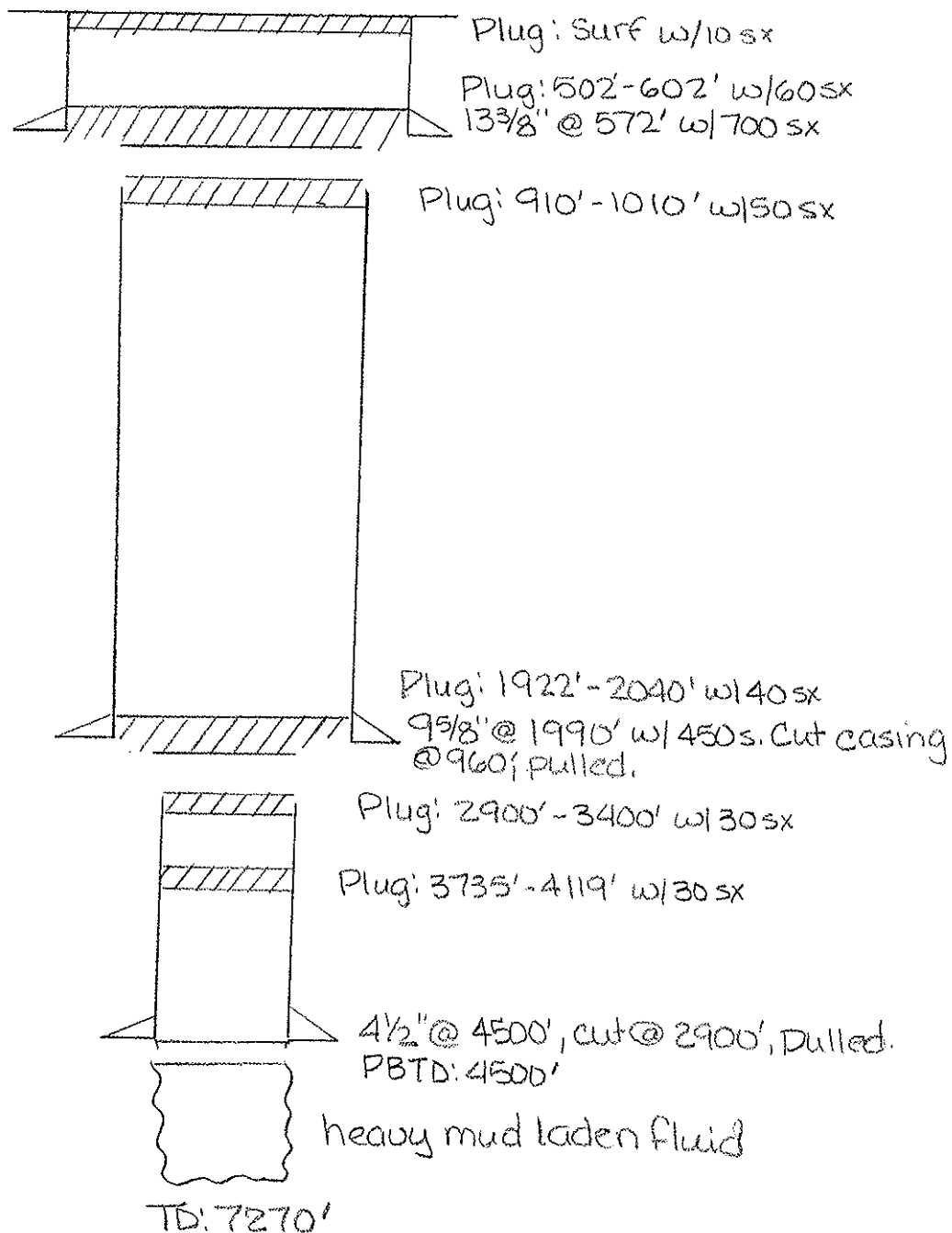
Drilling with Closed Loop System, haul off bins will be taken to Gandy Marley, CRI and Lea Land Farm.

SUBSURFACE

NAVAJO REFINING COMPANY

Map ID No. 37

Artificial Penetration Review

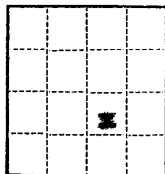
OPERATOR Pre-Ongard Well Op.LEASE Pre-OngardWELL NUMBER 1DRILLED NAPLUGGED 6-6-73STATUS PluggedLOCATION Sec. 11 -T18S-R27EMUD FILLED BOREHOLE NATOP OF INJECTION ZONE ~7148'API NO. 30-015-00870REMARKS: No casing into Injection Zone.

(SUBMIT IN TRIPLICATE)

Land Office Los Cruces

Lease No. _____

Unit _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Ruth C. Matherson

August 23, 1956

Well No. 1 is located 1900 ft. from RM line and 1900 ft. from [E] line of sec. 11NW 1/4 of SE 1/4 Sec. 11
(1/4 Sec. and Sec. No.)2-10-S
(Twp.)2-27-E
(Range)N M P M
(Meridian)Wilcox
(Field)Edley
(County or Subdivision)New Mexico
(State or Territory)The elevation of the derrick floor above sea level is _____ ft. To be reported later.

DETAILS OF WORK

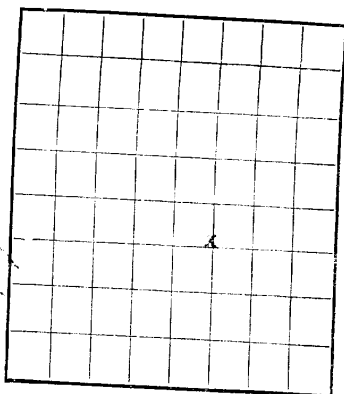
(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudlogging jobs, cementing points, and all other important proposed work)

We propose to drill the above well with rotary tools to an approximate depth of 7,000' to test the sand and top of Wolfcamp. Casing program will be as follows:

Size of Hole	Size of Casing	Depth	Remarks
17-1/2"	13-3/8"	500	200% of theoretical amount to circulate to surface.
13-1/4"	9-5/8"	2000	150% to top of Queen from Caliper survey containing 8% gel, 1/2 buf plug per sack + 100 sacks cement.
8-3/4"	5-1/2"	7000	100 sacks cement cement.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Stanolind Oil and Gas CompanyAddress Box 68HobbsNew MexicoBy Robert HendersonTitle Field Superintendent



LOCATE WELL CORRECTLY

 U. S. LAND OFFICE Las Cruces
 SERIAL NUMBER LC 068051
 LEASE OR PERMIT TO PROSPECT

 UNITED STATES
 DEPARTMENT OF THE INTERIOR
 GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

 Company Stanolind Oil and Gas Company Address Box 68 Hobbs, New Mexico
 Lessor or Tract Ruth C. McPherson Field Wildcat State New Mexico

 Well No. 1 Sec. 11 T 18-S R 27-E Meridian N M P M County Eddy
 Location 1980 ft. N. of South Line and 1980 ft. W. of East Line of Sec. 11, T-18-S, R-27-E Elevation 3593
 (Derrick floor relative to sea level)

 The information given herewith is a complete and correct record of the well and all work done thereon
 so far as can be determined from all available records.

Signed

Date November 26, 1956Title Production Foreman

The summary on this page is for the condition of the well at above date.

 Commenced drilling 9-1, 1956 Finished drilling 11-5, 1956

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

 No. 1, from _____ to _____ No. 4, from _____ to _____
 No. 2, from _____ to _____ No. 5, from _____ to _____
 No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

 No. 1, from _____ to _____ No. 3, from _____ to _____
 No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
13-3/8	48.36	8 Rd	H-40 Arisco	563	Guide	None			Surface
9-5/8	32.3	8 Rd	H-40	1975	Guide	None			Intermediate

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/8	572	700 sx neat	Howco		
9-5/8	1790	250 sx 8% gel + 1#tuf plug per sk.	Howco		
5-1/2	Casing was not run in this well.				

PLUGS AND ADAPTERS

 Heaving plug—Material _____ Length _____ Depth set _____
 Adapters—Material _____ Size _____

SHOOTING RECORD

FOLD MARK

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 0 feet to 7270 feet, and from _____ feet to _____ feet
 Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

_____, 19____ Put to producing Dry Hole, 19____

The production for the first 24 hours was _____ barrels of fluid of which _____ % was oil; _____ % emulsion; _____ % water; and _____ % sediment. Gravity, °Bé. _____

If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. _____

EMPLOYEES

H. L. Gilbert, Driller Z. Carr, Driller
George Wheat, Driller Bob Minnick, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	312	312	Red Bed
312	360	48	Anhy. & lime
360	482	122	Anhy.
482	539	57	Anhy. sand
539	630	91	Line anhy.
630	835	205	Shale & lime
835	1460	625	Line Anhy.
1460	1679	219	Shale & lime
1679	1726	47	Shale Anhy. Dolomite
1726	1828	102	Anhy. Shale Sand
1828	2118	290	lime
2118	2696	578	lime & Dolomite
2696	2790	94	Anhy. & Dolomite
2790	2947	157	Dolomite & Chert
2947	3026	79	Anhy. & Dolomite
3026	3434	408	Dolomite
3434	4154	720	Dolomite Anhy.
4154	4505	351	Dolomite & Chert
4505	4558	53	Dolomite
4558	4685	127	Sand & Dolomite
4685	5093	408	Dolomite
5093	5214	121	Dolomite & Chert
5214	5722	508	Dolomite & Shale
5722	5858	136	Dolomite & Chert
5858	6055	197	Dolomite
6055	6349	294	Dolomite & lime

FROM	TO	TOTAL FEET	FORMATION
------	----	------------	-----------

6949	6902	153	Dolomite & Shale
6952	6831	129	Dolomite & Shale
6850	6850	219	Dolomite & Shale
6911	6911	61	Dolomite & Shale
6932	6932	21	Dolomite & Shale
7066	7066	134	Dolomite & Shale
7074	7074	8	Dolomite & Shale
7074	7270	196	Dolomite & Shale

Core #1 1750-1758 Rec. 8' light brown to tan fine crystalline lime and dolomite and very thin streak of gray shale and sandy inclusion.

Core #2 1758-1780 Rec. 20' 1758-1775 tan dolomite w/streaks gray shale 1775-1778 brown sand w/good stain fluorescence and porosity.

Core #3 2500-2512 Rec. 11' brown lime to medium crystalline dolomite w/large anhyd. inclusions & vuggy to pin point porosity & poor to good scattered oil stain & odor.

Core #4 6723-6737 Rec. 10-1/2, 7' dark dense fine crystalline shaly dolomite and 3-1/2" sh micro x 1" dolomite. No show.

DST #1 2455-2512 tool open 2 hrs. test blow of air 1-1/2 hr. & died. Rec. 30' dry mud, no show oil, gas, or water. 3/4 hr. final BHPSI 65#, Int. RHP 55# final RHP 65#

DST #2 6264-6304 tool open 2-1/2 hrs. test blow throughout test. Rec. 1350' of shaly sulphur water, slightly gas cut. 30 min. initial BHSP 2390, final 50 min. initial flowing 60 PSIG. final flowing 600 PSIG.

DST #3 6685-6739 tool open 2-1/2 hrs. Rec. 180' dry mud, 370' sulphur water, no show oil or gas. 20 min. initial SIP 2665# final 2120#. Initial flow 75# final 315#.

DST #4 6915-6957 tool open 2 hrs. 5 min. Rec. 60' dry mud and 180' sulphur water, no show oil or gas. 20 min. SIBHP 2750 final SIBHP failed. Initial RHP 60% Offshore casing per 17000 on 12' of gas.

DATA

For recording

TOOL LOG

NEW MEXICO OIL CONSERVATION COMMISSION
MISCELLANEOUS REPORTS ON WELLS

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

1957 JAN 31 PM 2:36

COMPANY Pan American Petroleum Corporation, Box 68, Hobbs, New Mexico
(Address)

LEASE Ruth C. McPherson WELL NO. 1 UNIT J S 11 T 12 R 27

DATE WORK PERFORMED _____ POOL Undesignated

This is a Report of: (Check appropriate block) ☐ Results of Test of Casing Shut-off

☐ Beginning Drilling Operations

☐ Remedial Work

☐ Plugging

☒ Other Change in Company name

Detailed account of work done, nature and quantity of materials used and results obtained.

Change in operating name from "Stanolind Oil and Gas Company" to "Pan American Petroleum Corporation" effective February 1, 1957.

FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

Original Well Data:

DF Elev. _____ TD _____ PBD _____ Prod. Int. _____ Compl Date _____

Tbng. Dia _____ Tbng Depth _____ Oil String Dia _____ Oil String Depth _____

Perf Interval (s) _____

Open Hole Interval _____ Producing Formation (s) _____

RESULTS OF WORKOVER:

BEFORE

AFTER

Date of Test

Oil Production, bbls. per day

Gas Production, Mcf per day

Water Production, bbls. per day

Gas-Oil Ratio, cu. ft. per bbl.

Gas Well Potential, Mcf per day

Witnessed by _____

(Company)

OIL CONSERVATION COMMISSION

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

Name W. L. Armstrong

Name Ralph H. Newkirk

Title _____

Position Field Superintendent

Date FEB 4 1957

Company Pan American Petroleum Corporation



copy to
N. M. O. C. C. COPY
(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Lead Office: Albuquerque
Lesse No.: 10-000001
State: RECEIVED

MAR 7 1962

O. C. C.
ARTESIA, OFFICE

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	<u>X</u>
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Ruth C. McPherson

December 2, 1959

Well No. 1 is located 1900 ft. from S line and 1900 ft. from E line of sec. 11
NW/4-SE/4, Sec. 11 T-18-S R-27-E NMPN
(Of Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wildest Eddy New Mexico
(Field) (County or Subdivision) (State or Territory)

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

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate casing joints, cementing points, and all other important proposed work)

On 11-11-59 P I A operations were completed. Work done and plugs set as follows:

1. Cut and pulled 9 5/8" casing @ 960'.
2. Set 25 sx cement plug @ 960'; 15 sx cement in bottom of 13 3/8" casing @ 572'; 10 sx cement plug at surface. All intervals filled with heavy mud laden fluid.
3. Set P I A marker; restored ground to natural contour.

per [signature] file

RECEIVED

DEC 7 1959

U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

I understand that this plan of work will receive approval in writing by the Geological Survey before operations may be commenced.

Company Pan American Petroleum Corporation

Address Box 66

Hobbs, New Mexico

By [signature]
TSM Area Superintendent

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☐DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☐

OTHER

Re-Entry

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Bill J. Smith

3. ADDRESS OF OPERATOR

1504 Stagecoach Dr., Arlington, Texas, 76013

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

1980' FS&EL Section 11, T-18-S, R-27-E

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

14 miles east of Artesia

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

660'

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

none

16. NO. OF ACRES IN LEASE

40

17. NO. OF ACRES ASSIGNED

40

21. ELEVATIONS (Show whether DE, RT, GR, etc.)

22. APPROX. DATE WORK WILL START*

September 15, 1970

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17"	13 3/8"	N/A*	572'	700 sacks
11"	9 5/8"	N/A*	1990	450 sacks

Propose to clean out plugs to about 1900', tie onto 9 5/8" casing stub with casing bowl and 32.3 # 9 5/8" casing, perforate indicated pay in Grayburg formation, stimulate as necessary and test.

* *Turn American title corp.*

Casing set when well originally drilled in 1956. 13 3/8" casing was not pulled. 9 5/8" casing cut at 960' and pulled.

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

24.

SIGNED

Bill J. Smith

TITLE

DATE

9-1-70

(This space for Federal or State office use)

PERMIT NO.

APPROVED BY

COMMISSIONER OF APPROVAL, IF ANY:

APPROVED
SEP 8 - 1970
R. L. BECKMA
ACTING DISTRICT ENGINEER

THIS APPROVAL IS RESCINDED IF OPERATIONS
ARE NOT COMMENCED WITHIN 3 MONTHS.
EXPIRES DEC 8 - 1970
See Instructions On Reverse Side

RECEIVED

DATE

SEP 9 1970

O. C. C.
ARTESIA, OFFICE

N MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

Operator Bill J. Smith		Lease Ruth C. McPherson		Well No. 1
Unit Letter J	Section 11	Township 18-S	Range 27-E	County Eddy
Actual Footage Location of Well: 1980 feet from the South line and 1980 feet from the East line				
Ground Level Elev. 3580	Producing Formation Grayburg	Pool Artesia	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

RECEIVED

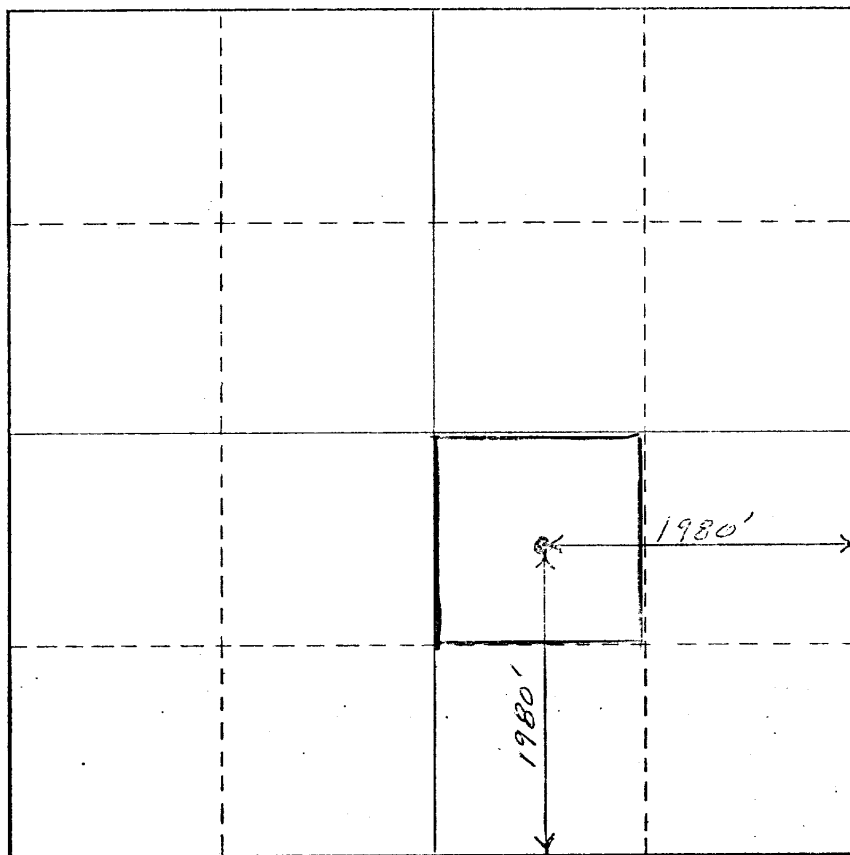
SEP 9 1970

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

O. C. B.

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

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



CERTIFICATION

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

Name *Bill J. Smith*
Position _____

Company _____

Date _____

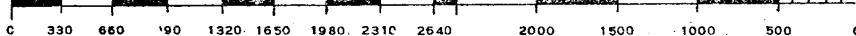
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed _____

Refer to Original Plat

Registered Professional Engineer
and/or Land Surveyor

Certificate No. _____



COUNTY EDDY FIELD Artesia STATE NM ME 00870

OPR SMITH, BILL J. MAP

1 McPherson, Ruth C. CO-ORD

Sec 11, T-18-S, R-27-E

1980' FSL, 1980' FEL of Sec

Re-Cmp 4-19-71	FORMATION	DATUM	FORMATION	DATUM
CSG & SX TUBING				
13 3/8" at 572' w/700 sx				
9 5/8" at 1990' w/450 sx (pulled)				
4 1/2" at 4500'				

LOGS EL GR RA IND MC A

TD 7270'; PBD 4500'

TEMPORARILY ABANDONED

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Reproduction rights reserved by Williams & Lee Sealing Service, Inc.

CONT. DATE PROP DEPTH 1800' TYPE MO

9-22-70 F.R. 9-15-70; Opr's Elev. 3580' GL.
PD 1800' WO (Grayburg)
(Orig. Scanolind Oil & Gas #1 McPherson-Federal,
PSA 11-7-56, OTD 7270')
TD 7270'; PBD 4500'; Prep PB to Grayburg
Cleaned Out to 4500'

9-28-70 Perf (Yesso) 4070-4100'
10-26-70 Acid (4070-4100') 3000 gals
1-8-71 Swbd blk sul wtr (4070-4100')
TD 7270'; PBD 4500'; SI
TD 7270'; PBD 4500'; SI
TD 7270'; PBD 4500'; SI

EDDY SMITH, BILL J. Artesia NM Sec 11, T18S, R27E
1 McPherson, Ruth C. Page #2

2-22-71 TD 7270'; PBD 4500'; SI
4-12-71 TD 7270'; PBD 4500'; SI
4-19-71 TD 7270'; PBD 4500'; TEMPORARILY ABANDONED
4-22-71 COMPLETION REPORTED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPL
(Other instructions
verse side)Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

LC-068051

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. NAME OF OPERATOR Amoco Production Company	2. ADDRESS OF OPERATOR BOX 68, HOBBS, N. M. 88240	3. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1980' FSL x 1980' EEL Sec. 11 (Unit 1, NW 1/4 SE 1/4)	4. PERMIT NO.	5. ELEVATIONS (Show whether DF, RT, GR, etc.) 3593' D.F.	6. UNIT AGREEMENT NAME	7. FARM OR LEASE NAME SMITH MCPHERSON	8. WELL NO. 1	9. FIELD AND POOL, OR WILDCAT WILDCAT-	10. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 11-18-27 NMPM	11. COUNTY OR PARISH EDDY	12. STATE N.M.
---	--	---	---------------	---	------------------------	--	------------------	---	--	------------------------------	-------------------

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

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

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

Physical abandonment of well concluded 6-6-73.
Plugged and abandoned as follows:
Filled hole w/ mud. (PBD-4365)
Spotted 30 cu cement plug 4119'-3735' (BLN. PERS. 4100'-4070')
Shot & pulled 4 1/2" CSG. from 2990'.
Spotted 30 cu cement plug 3040'-2900' (in + out of 4 1/2" stub)
" 40 5x " 2040'-1922'
No 9 5/8" casing found in hole.
Spotted 50 5x cement plug 1010'-910'.
" 60 " " 602'-602' (13 3/8" CSA 572)
" 10 " " @ surface & erected P & A marker.
Location shall be cleaned & levelled.

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

SIGNED

TITLE AREA ENGINEER

DATE 6-15-73

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

04-4- USGS
1- DIV
1- SUSP
1- IRY
2- ARCO
APPROVED
JUL 13 1973
R. L. BECKMAN
ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

SUBSURFACE

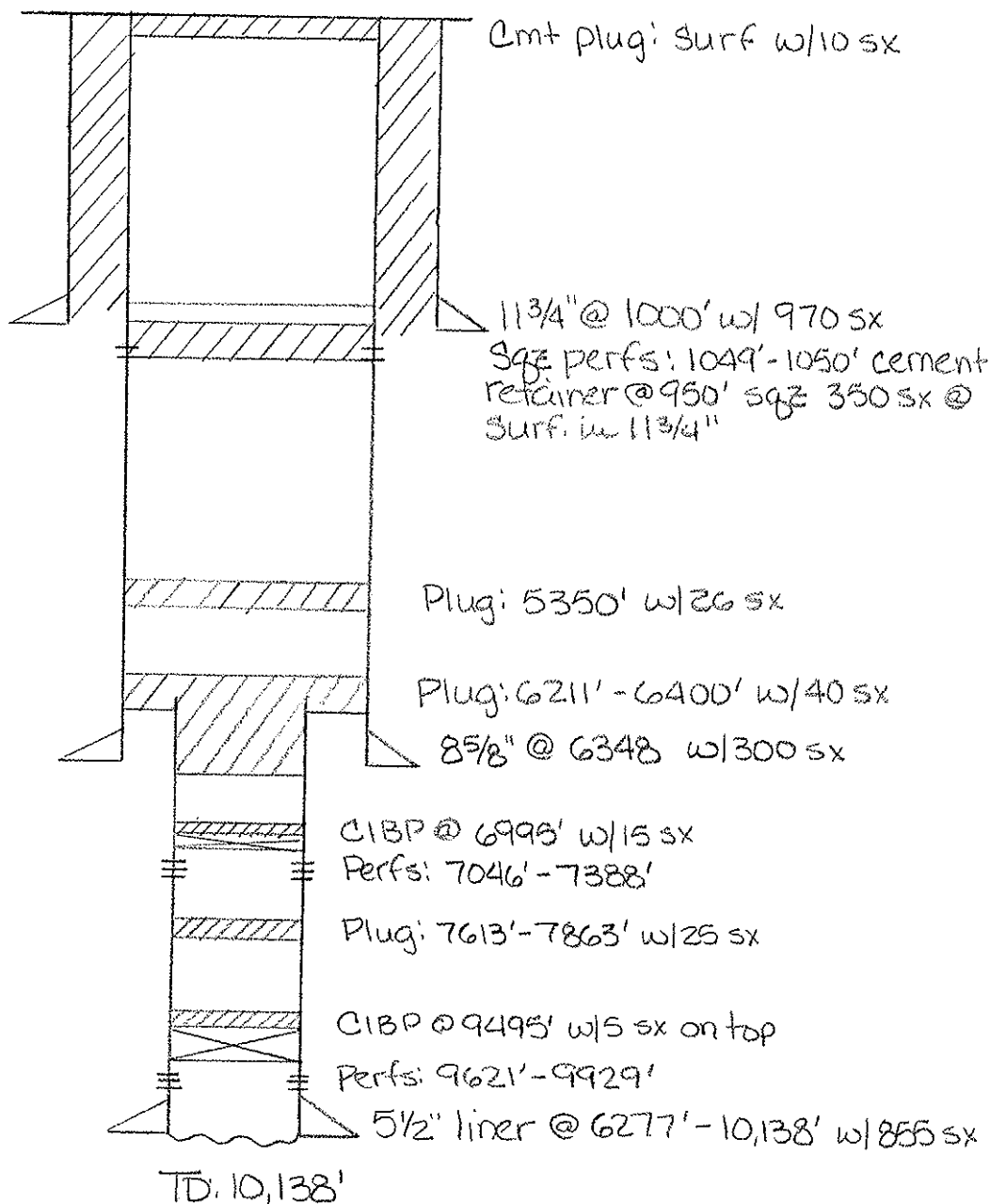
NAVAJO REFINING COMPANY

Map ID No. 40

Artificial Penetration Review

OPERATOR Pre-Ongard Well Op.LEASE Pre-OngardWELL NUMBER 1DRILLED NAPLUGGED NASTATUS PluggedLOCATION Sec. 11 -T18S-R27EMUD FILLED BOREHOLE NATOP OF INJECTION ZONE 7070'API NO. 30-015-20510

REMARKS: Calculated Top of Cement behind 5 1/2" liner @ 6277'



NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

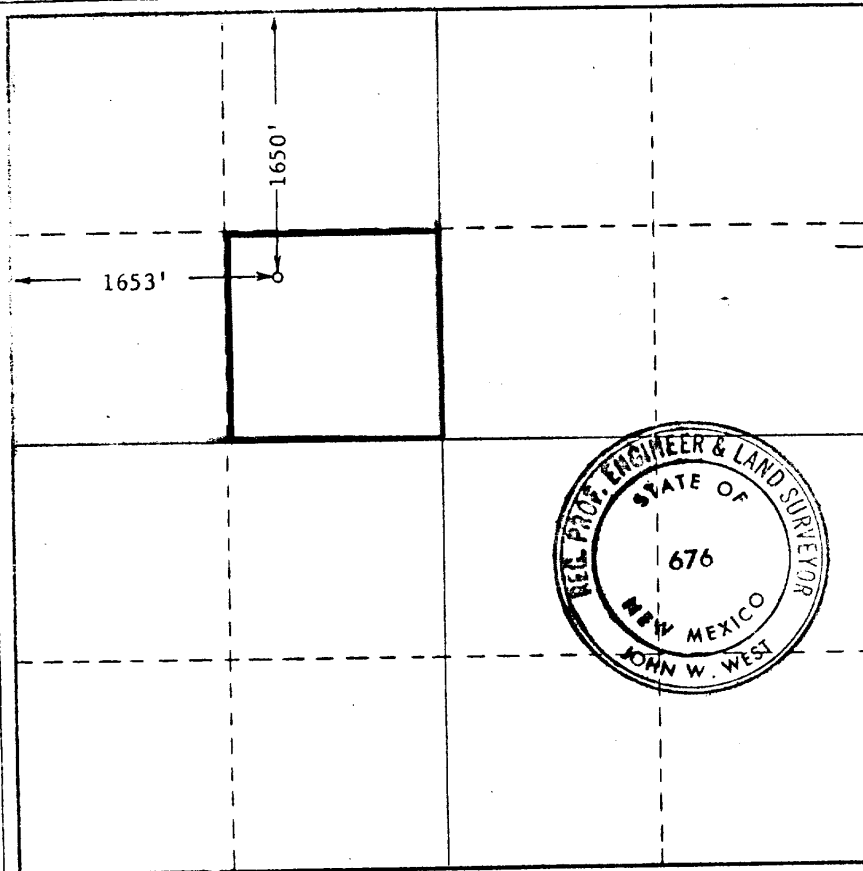
Operator AMOCO PRODUCTION COMPANY			Lease MALCO "A" FEDERAL		Well No. 3
Unit Letter F	Section 11	Township 18 SOUTH	Range 27 EAST	County EDDY	
Actual Footage Location of Well: 1650 feet from the NORTH line and 1653 feet from the WEST line					
Ground Level Elev. -	Producing Formation Miss.		Pool Wildcat	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communization, unitization, force-pooling, etc?

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

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

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



CERTIFICATION

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

Name _____

Position
AREA SUPERINTENDENT

Company
Amoco Production Company

Date

SEP 27 1971

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

Date Surveyed

SEPTEMBER 16, 1971

Registered Professional Engineer and/or Land Surveyor

John W. West
Certification No. **676**

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

DEC 29 1972
Form O-102
Supersedes O-128
Effective 10/1/72

All distances must be from the outer boundaries of the Section

APC 20-015-20510

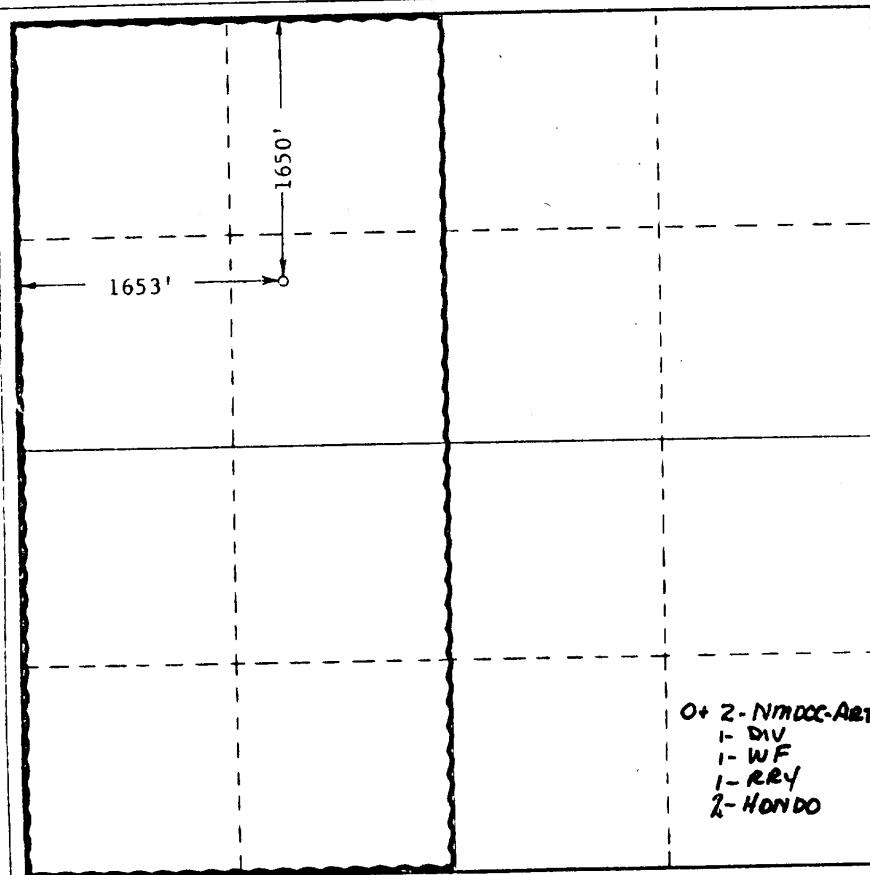
Lessor AMOCO PRODUCTION COMPANY		Lease MALCO S. FEDERAL		ARTESIA, OFFICE		#1
Unit Letter F	Section 11	Township 18 SOUTH	Range 27 EAST	County EDDY		
Actual Footage Location of Well:						
1650 feet from the NORTH line and		1653 feet from the WEST line				
Ground Level Elev. 3587 RDB	Producing Formation MORROW-(PENN)		Pool SCOGGIN DRAW-MORROW	Leased Area Acres 320		

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

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

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

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



CERTIFICATION

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

Name *James J. West*
Position
AREA SUPERINTENDENT Engineer
Company
Amoco Production Company

Date
12-28-72

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

Date Surveyed
SEPTEMBER 16, 1971

Registered Professional Engineer
and/or Land Surveyor

John W. West
Certification No. **676**

0 330 660 990 1320 1650 1980 2310 2640 2000 1800 1600 1400 1200 1000 800 600 400 200 0

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. LC-067858	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Anco Production Company		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR BOX 68, HOBBS, N. M. 88240		8. FARM OR LEASE NAME MALCO A FEDERAL	
4. LOCATION OF WELL (Report location clearly and in accordance with State requirements.) At surface 1650' FNL x 1653' FWL Sec. 11 (F, SE 1/4 NW 1/4) At proposed prod. zone		9. WELL NO. 3	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		10. FIELD AND POOL, OR WILDCAT WILDCAT	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 11-18-27 NMPM	
16. NO. OF ACRES IN LEASE		12. COUNTY OR PARISH EDDY	
17. NO. OF ACRES ASSIGNED TO THIS WELL 40		13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		20. ROTARY OR CABLE TOOLS ROTARY	
21. ELEVATIONS (Show whether DF, RT, GR, etc.)		22. APPROX. DATE WORK WILL START*	

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	11 3/4"	42-47#	1000'	Circ
11"	8 5/8"	24-36#	6200'	Fill 600' above 960
7 7/8"	5 1/2" Linner	14-17#	6200-TD	Squeeze behind liner.

After drilling well logs will be run and evaluations made, perforating and/or stimulating as necessary in attempting commercial production.

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ARTESIA, NEW MEXICO

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

24. SIGNED _____ TITLE AREA SUPERINTENDENT DATE 10-6-71

(This space for Federal or State office use)

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY _____
CONDITIONS OF APPROVAL:

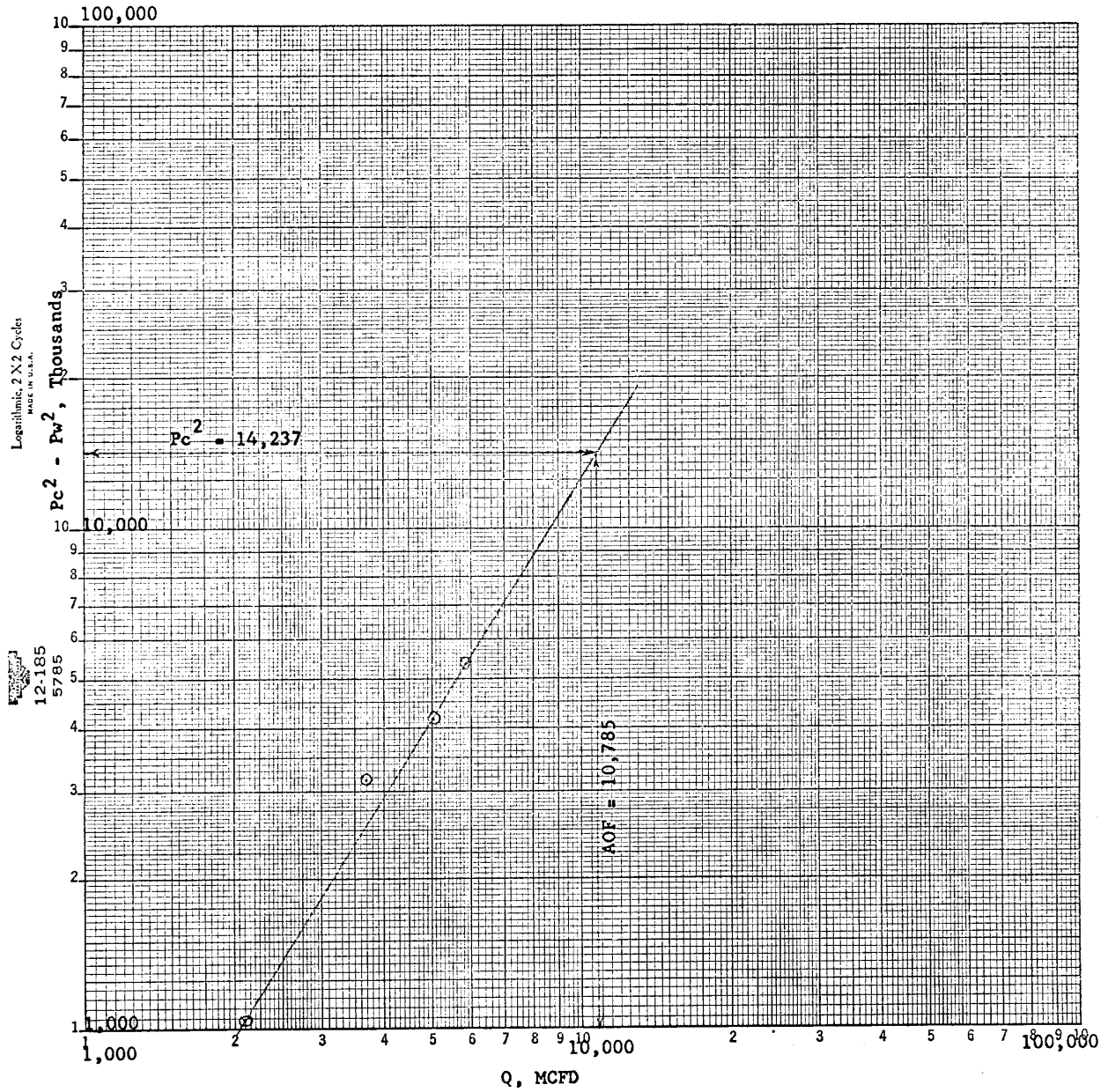
THIS APPROVAL IS RESCINDED IF OPERATIONS
ARE NOT COMMENCED WITHIN 3 MONTHS
EXPIRES JAN - 7 1972

*See Instructions On Reverse Side

4 - USGS-ART
1 - ACJR
1 - SUSP
1 - RRY
1 - Arco - Roswell
Doug Kluzik

APPROVED
OCT - 2 1971
R. L. BEEKMAN
ACTING DISTRICT ENGINEER

Amoco Production Company
 Malco "S" Federal No. $\frac{1}{2}$ S
 F-11-18S-27E
 12/22/71



NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

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Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 12/22/71		JAN 3 1972	
Company Amoco Production Company				Connection None		O.C.C. ARTESIA, NEW MEX.	
Pool Wildcat				Formation Morrow Penn		Unit API No. 30-015-20510	
Completion Date 12/18/71		Total Depth 10,168		Plug Back TD 10,000		Elevation 3587 KDB	
Casing Size 5-1/2" Liner		Well No. 17#		Set At 4,892		Perforations: From 9621 To 9929	
Tubg. Size 2-3/8"		Well No. 4.7		Set At 1.995		Perforations: From Open End To	
Type Well - Single - Brdenhead - G.O. or G.O. Multiple Single				Packer Set At 9491'		County Eddy	
Producing Thru 2-3/8" Tubg		Reservoir Temp. °F 145° 9775		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2	
L 9504		H 9504		Q _g 0.630		% CO ₂ 0.38	
				% N ₂ 0.31		% H ₂ S 0	
				Prover -		Meter Run 6"	
						Taps Flange	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							2862	Pkr	40 hrs
1.	6.065 x 2.500		565	5.3	110	2689	60	Pkr	1 hr
2.	6.065 x 2.500		560	16.0	97	2453	60	Pkr	1 hr
3.	6.065 x 2.500		590	27.5	87	2220	60	Pkr	1 hr
4.	6.065 x 2.500		600	36.0	81	2035	60	Pkr	1 hr
5.									

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	30.31	55.34	578.2	0.9551	1.260	1.038	2.096
2	30.31	95.76	573.2	0.9662	1.260	1.041	3.678
3	30.31	128.79	603.2	0.9750	1.260	1.048	5.026
4	30.31	148.56	613.2	0.9804	1.260	1.049	5.836
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 74.136 Mcf/bbl.
1	0.86	570	1.57	0.928	A.P.I. Gravity of Liquid Hydrocarbons 54.0 Deg.
2	0.85	557	1.53	0.922	Specific Gravity Separator Gas 0.630
3	0.90	547	1.50	0.911	Specific Gravity Flowing Fluid
4	0.91	541	1.49	0.908	Critical Pressure 673 P.S.I.A.
5					Critical Temperature 364 °R

*P _g 3773.2	*P _w 14,237		
NO.	P _r ²	P _w ²	P _r ² - P _w ²
1	3632.8	13,197	1,040
2	3330.2	11,090	3,147
3	3173.2	10,069	4,168
4	2981.1	8,887	5,350
5			

$$(1) \frac{P_g^2}{P_r^2 - P_w^2} = 2.661$$

$$AOF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^{0.75} = 10.785$$

$$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.848$$

Absolute Open Flow 10,785 Mcfd @ 15.025	Angle of Slope 0	Slope, n 0.626
Remarks: * P _c measured with bottom hole pressure recorder		
Approved By Commission:	Conducted By: Al Klaar	Calculated By: Ed Snook
		Checked By: Ed Snook

Copy to S F

REQUEST FOR THE EXTENSION OF AN EXISTING POOL

OR

THE CREATION OF A NEW POOL

TO: The Oil Conservation Commission
State of New Mexico

Date 2-10- 1972

The Amoco Production Company BOX 68, HOBBS, N. M. 88240
Name of Operator

MALCO S. Federal
Name of Lease

1 Located 1650 feet from the NORTH line and 1653 feet
Well No.

from the WEST line of 11 18-S 27-E
Section Township Range

is outside the boundaries of any pool producing from the same formation. On the basis of the information submitted here-
with on form C-105, we hereby request that the
pool be extended to include the following described area

or that a new pool be created to include the following described area W/2 SEC. 11, T-18-S, R-27-E

Suggested name: SCOGGIN DRAW-PENN

Amoco Production Company

Operator

Name of Producing Formation:

(MORROW)-PENN

AREA SUPERINTENDENT

Representative

031 NMOC-ART
1- DIV
1- W F
1- HONDO

R-4291
Scoggin Draw-Morrow
5-1-72

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FEB 14 1972

O. C. C.
ARTESIA, OFFICE