UIC - I - 8-1, 2 & 3

WDWs-1, 2 & 3 PERMITS, RENEWALS, & MODS (13 of 18)

2017

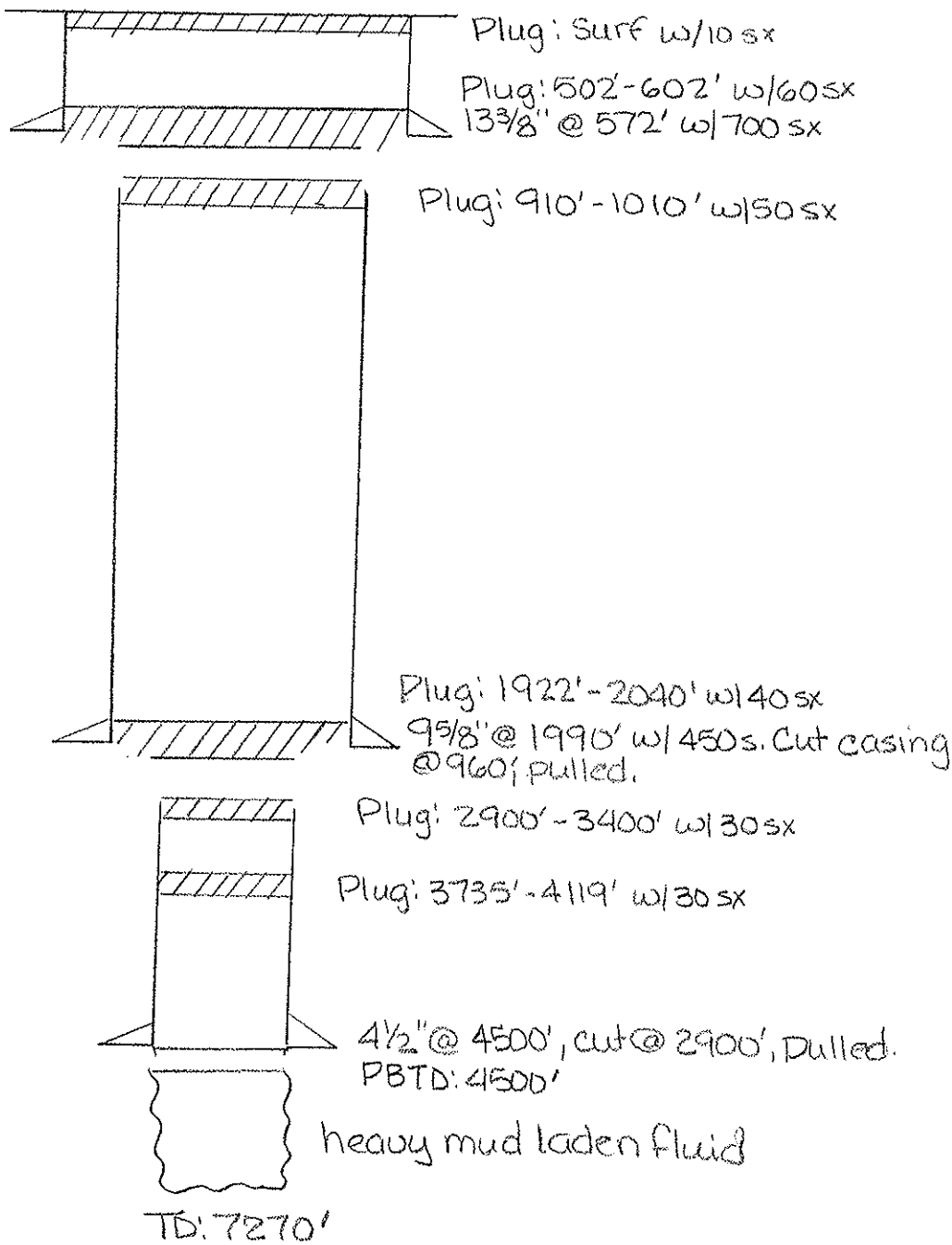
SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 37
Artificial Penetration Review

OPERATOR Pre-Ongard Well Op.
LEASE Pre-Ongard
WELL NUMBER 1
DRILLED NA
PLUGGED 10-10-73

STATUS Plugged
LOCATION Sec. 11 -T18S-R27E
MUD FILLED BOREHOLE NA
TOP OF INJECTION ZONE ~7148'
API NO. 30-015- 00870

REMARKS: No casing into Injection Zone.



Map ID 37

Budget Bureau 42-R358.3.
Approval expires 12-31-55.

Form 9-331a
(Feb. 1951)

		X	

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Las Cruces

Lease No.

Unit

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

Ruth C. McPherson August 23, 1956

Well No. 1 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 11

NW/4 of SE/4 Sec. 11 (¼ Sec. and Sec. No.) T-18-S (Twp.) R-27-E (Range) N M P M (Meridian)

Wildcat (Field) Eddy (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is ..... ft. To be reported later.

DETAILS OF WORK

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

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

Size of Hole	Size of Casing	Depth	Cement
17-1/2"	13-3/8	500	200% of theoretical amount to circulate to surface.
12-1/4"	9-5/8	2000	150% to top of Queen from Caliper survey containing 6% gel, 1/ tuf plug per sack + 100 sacks neat.
8-3/4"	5-1/2	7000	300 sacks cement.

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

Company Stanolind Oil and Gas Company

Address Box 68

Hobbs

New Mexico

By Joseph L. Henderson

Title Field Superintendent

U. S. GOVERNMENT PRINTING OFFICE 16—8437-5

Map ID 37

Form 9-330

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

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company Stanolind Oil and Gas Company Address Box 68 Hobbs, New Mexico

Lessor or Tract Ruth C. McPherson Field Wildcat State New Mexico

Well No. 1 Sec. 11 T. 18-S R. 27-E Meridian N M P M County Eddy

Location 1980 ft. [N.] of South line and 1980 ft. [W.] of East Line of Sec. 11, T-18-S, R-27-E Elevation 3593 (Derrick floor relative to sea level)

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

Signed

Date November 26, 1956 Title Production Foreman

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

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

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from to No. 4, from to

No. 2, from to No. 5, from to

No. 3, from to No. 6, from to

IMPORTANT WATER SANDS

No. 1, from to No. 3, from to

No. 2, from to No. 4, from to

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
13-3/8	48&36	8 Rd	H-40 Armco	563	Guide	None			Surface
9-5/8	32.3	8 Rd	H-40	1975	Guide	None			Intermediate

MUDDING AND CEMENTING RECORD

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

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth set

Adapters—Material Size

SHOOTING RECORD

FOLD | MARK

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

TOOLS USED

Rotary tools were used from 0 feet to 7270 feet, and from ..... feet to ..... feet

Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet

DATES

..... , 19..... Put to producing Dry Hole , 19.....

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

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

Rock pressure, lbs. per sq. in. .....

EMPLOYEES

H. L. Gilbert , Driller Z. Carr , Driller

George Wheat , Driller Bob Minnick , Driller

FORMATION RECORD

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

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
6349	6502	153	Dolomite & Shale
6502	6631	129	Dolomite
6631	6850	219	Dolomite & Shale
6850	6911	61	Dolomite Lime Shale
6911	6932	21	Dolomite & Lime
6932	7066	134	Dolomite & Shale
7066	7074	8	Dolomite & Lime
7074	7270	196	Dolomite & Shale

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

Core #2 1758-1780 Rec. 20', 1758-1775 limy dolomite w/streaks gray shale 1775-1778 brown sand w/good stain flourescent and porocity.

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

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

DST #1 2455-2512 tool open 2 hrs. fair blow of air 1-1/2 hr. & died. Rec. 30' drl mud, no show oil, gas, or water. 3/4 hr. Final BHPSI 65#, Init. FBHP 55# Final FBHP 65#

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

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

DST #4 6915-6957 tool open 2 hrs. 5 min. Rec. 60' drlg mud and 180' sulphur water, no show oil or gas, 20 min. SIBHP 2750 Final SIBHP failed. Initial FBHP 60#

Form C-103
(Revised 3-55)

NEW MEXICO OIL CONSERVATION COMMISSION
MISCELLANEOUS REPORTS ON WELLS

HOBBS OFFICE OCC

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

1957 JAN 31 PM 2:36

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

LEASE Ruth C. McPherson WELL NO. 1 UNIT J S 11 T 18 R 27

DATE WORK PERFORMED _____ POOL Undesignated

This is a Report of: (Check appropriate block)

- [ ] Beginning Drilling Operations
- [ ] Plugging
- [ ] Results of Test of Casing Shut-off
- [ ] Remedial Work
- [x] Other Change in Company name

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

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

FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

Original Well Data:

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

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

Perf Interval (s) _____

Open Hole Interval _____ Producing Formation (s) _____

RESULTS OF WORKOVER:	BEFORE	AFTER
Date of Test		
Oil Production, bbls. per day		
Gas Production, Mcf per day		
Water Production, bbls. per day		
Gas-Oil Ratio, cu. ft. per bbl.		
Gas Well Potential, Mcf per day		

Witnessed by _____ _____ (Company)

OIL CONSERVATION COMMISSION

Name W. L. Armstrong
Title
Date FEB 4 1957

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

Name Ralph K. Henderson
Position Field Superintendent
Company Pan American Petroleum Corporation

copy to N. M. O. C. C. COPY

APPROVED
DEC 7 1959
CHARLES A. KRAUPP
ACTING DISTRICT ENGINEER

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office [redacted]
Lease No. [redacted]
Unit

RECEIVED
MAR 7 1962
O. C. C.
ARTESIA, OFFICE

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

Ruth C. McPherson

December 2, 1959

Well No. 1 is located 1980 ft. from {S} line and 1980 ft. from {E} line of sec. 11

NW/4-SE/4, Sec. 11 (Qtr. Sec. and Sec. No.) T-18-S (Twp.) R-27-E (Range) NMPM (Meridian)

Wildcat (Field) Eddy (County or Subdivision) New Mexico (State or Territory)

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

RECEIVED
JAN 29 1962
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

DETAILS OF WORK

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

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

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

RECEIVED
DEC 7 1959
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

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

Company Pan American Petroleum Corporation

Address Box 68

Hobbs, New Mexico

By [signature]

Title Area Superintendent

Form 9-331 C
(May 1963)

N. M. O. C. C. COPY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

Copy to SF

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL ☐ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ OTHER Re-Entry SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR: Bill J. Smith

3. ADDRESS OF OPERATOR: 1504 Stagecoach Dr., Arlington, Texas, 76013

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FS&EL Section 11, T-18-S, R-27-E
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.: NM-6850

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Ruth C. McPherson

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Artesia

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

12. COUNTY OR PARISH: Eddy

13. STATE: New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 14 miles east of Artesia

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

16. NO. OF ACRES IN LEASE: 40

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: none

19. PROPOSED DEPTH: 1800

20. ROTARY OR CABLE TOOLS: Rotary

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

22. APPROX. DATE WORK WILL START*: September 15, 1970

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17"	13 3/8#	N/A*	572'	700 sacks
11	9 5/8#	N/A*	1990	450 sacks

Propose to clean out plugs to about 1900', tie onto 9 5/8" casing stub with casing bowl and 32.3 # 9 5/8" casing, perforate indicated pay in Grayburg formation, stimulate as necessary and test.

* Information on file only.
Casing set when well originally drilled in 1956. 13 3/8" casing was not pulled. 9 5/8" casing cut at 960' and pulled.

RECEIVED SEP 3 1970 U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

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

24.

SIGNED Bill J. Smith TITLE DATE 9-1-70

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED SEP 8 1970 R. L. BEEKMA ACTING DISTRICT ENGINEER

THIS APPROVAL IS RESCINDED IF OPERATIONS ARE NOT COMMENCED WITHIN 3 MONTHS. EXPIRES DEC 8 1970

RECEIVED SEP 9 1970 O. C. C. ARTESIA, OFFICE

See Instructions On Reverse Side

N MEXICO OIL CONSERVATION COMMISS

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

Operator	Lease	Well No.
Bill J. Smith	Ruth C. McPherson	1

Unit Letter	Section	Township	Range	County
J	11	18-S	27-E	Eddy

Actual Footage Location of Well: 1980 feet from the South line and 1980 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3580	Grayburg	Artesia	40 Acres

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

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

RECEIVED

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

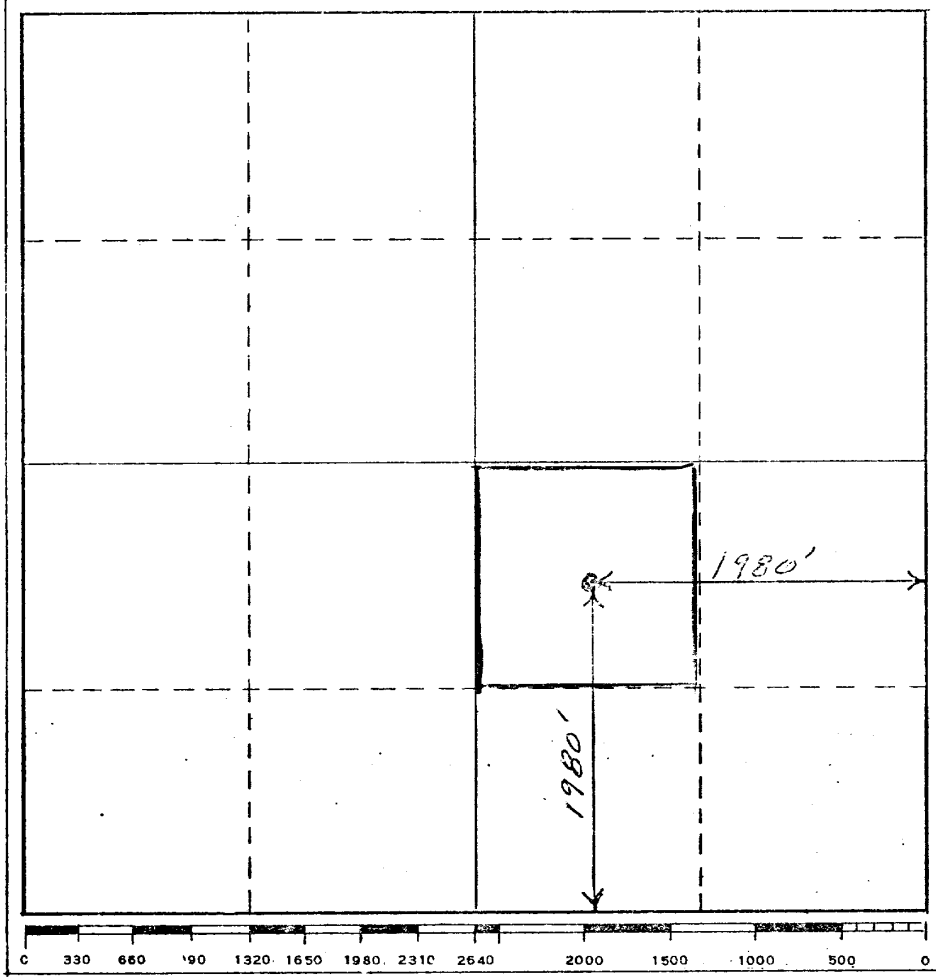
SEP 9 1970

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

O. C. C.
ARTESIA, OFFICE

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

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



CERTIFICATION

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

Name: Bill J. Smith

Position

Company

Date

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

Date Surveyed: Refer to Original Plat

Registered Professional Engineer and/or Land Surveyor

Certificate No.

OWWO

COUNTY EDDY FIELD Artesia STATE NM MH 00870

OPR SMITH, BILL J. MAP

1 McPherson, Ruth C.

Sec 11, T-18-S, R-27-E CO-ORD

1980' FSL, 1980' FEL of Sec

CLASS OWDF EL 3592R

Re-Cmp 4-19-71

FORMATION	DATUM	FORMATION	DATUM

CSG & SX - TUBING
13 3/8" at 572' w/700 sx
9 5/8" at 1990' w/450 sx (Pulled)
4 1/2" at 4500'

LOGS EL GR RA IND HC A

TD 7270'; PBD 4500'

TEMPORARILY ABANDONED

CONT. PROP DEPTH 1800' TYPE WO

DATE

F.R. 9-15-70; Opr's Elev. 3580' GL
PD 1800' WO (Grayburg)
(Orig. Stanolind Oil & Gas #1 McPherson-Federal, P&A 11-7-56, OTD 7270')

9-22-70 TD 7270'; PBD 4500'; Prep PB to Grayburg
Cleaned Out to 4500'
Ran 4 1/2" Casing
Perf (Yeso) 4070-4100'
Acid (4070-4100') 3000 gals
Swbd blk sul wtr (4070-4100')

9-28-70 TD 7270'; PBD 4500'; SI
10-26-70 TD 7270'; PBD 4500'; SI
1-8-71 TD 7270'; PBD 4500'; SI

2-22-71 TD 7270'; PBD 4500'; SI
4-12-71 TD 7270'; PBD 4500'; SI
4-19-71 TD 7270'; PBD 4500'; TEMPORARILY ABANDONED
4-22-71 COMPLETION REPORTED

OWWO

COUNTY EDDY FIELD Artesia STATE NM MH 00870

OPR SMITH, BILL J. MAP

1 McPherson, Ruth C.

Sec 11, T-18-S, R-27-E CO-ORD

1980' FSL, 1980' FEL of Sec

CLASS OWDF EL 3592Z

Re-Cmp 4-19-71

FORMATION	DATUM	FORMATION	DATUM
TD 7270'; PBD 4500'			

CSG & SX - TUBING
13 3/8" at 572' w/700 sx
9 5/8" at 1990' w/450 sx (Pulled)
4 1/2" at 4500'

LOGS EL GR RA IND HC A

TEMPORARILY ABANDONED

CONT. PROP DEPTH 1800' TYPE WO

DATE

F.R. 9-15-70; Opr's Elev. 3580' GL
PD 1800' WO (Grayburg)
(Orig. Stanolind Oil & Gas #1 McPherson-Federal, P&A 11-7-56, OTD 7270')

9-22-70 TD 7270'; PBD 4500'; Prep PB to Grayburg
Cleaned Out to 4500'
Ran 4 1/2" Casing
Perf (Yeso) 4070-4100'
Acid (4070-4100') 3000 gals
Swbd blk sul wtr (4070-4100')

9-28-70 TD 7270'; PBD 4500'; SI
10-26-70 TD 7270'; PBD 4500'; SI
1-8-71 TD 7270'; PBD 4500'; SI

2-22-71 TD 7270'; PBD 4500'; SI
4-12-71 TD 7270'; PBD 4500'; SI
4-19-71 TD 7270'; PBD 4500'; TEMPORARILY ABANDONED
4-22-71 COMPLETION REPORTED

N. M. O. C. C. COPY

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL ☐ GAS WELL ☐ OTHER DRY-HOLE RE-ENTRY

2. NAME OF OPERATOR: Amoco Production Company

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface: 1980' FSL x 1980' FEL Sec. 11 (Unit J, NW/4 SE/4)

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3593' D.F.

5. LEASE DESIGNATION AND SERIAL NO.: LC-068051

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: SMITH McPHERSON

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: WILDCAT-

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27 NMPM

12. COUNTY OR PARISH: EDDY

13. STATE: N.M.

RECEIVED JUL 13 1973 U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

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

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

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

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

Physical abandonment of well concluded 6-6-73.
Plugged and abandoned as follows:
Filled hole w/ mud. (PBD-4365')
Spotted 30 sx cement plug 4119'-3735' (BLIN. PERS. 4100'-4070')
Shot & pulled 4½" csg. from 2990'.
Spotted 30 Sx cement plug 3040'-2900' (in + out of 4½" stub)
" 40 Sx " " 2040'-1922'
No 9⅝" Casing found in Hole.
Spotted 50 Sx. cement plug 1010'-910'
" 60 " " " 602'-502' (13⅜" CSA 572')
" 10 " " " @ surface & erected P&A marker.
Location shall be cleaned & Levelled.

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

SIGNED [illegible] TITLE AREA ENGINEER DATE 6-15-73

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED JUL 13 1973 R. L. BEEKMAN ACTING DISTRICT ENGINEER

04 4- USGS-ARTESIA
1- DIV
1- SUSA
1- IRY
2- ARCO-MIDLAND

*See Instructions on Reverse Side

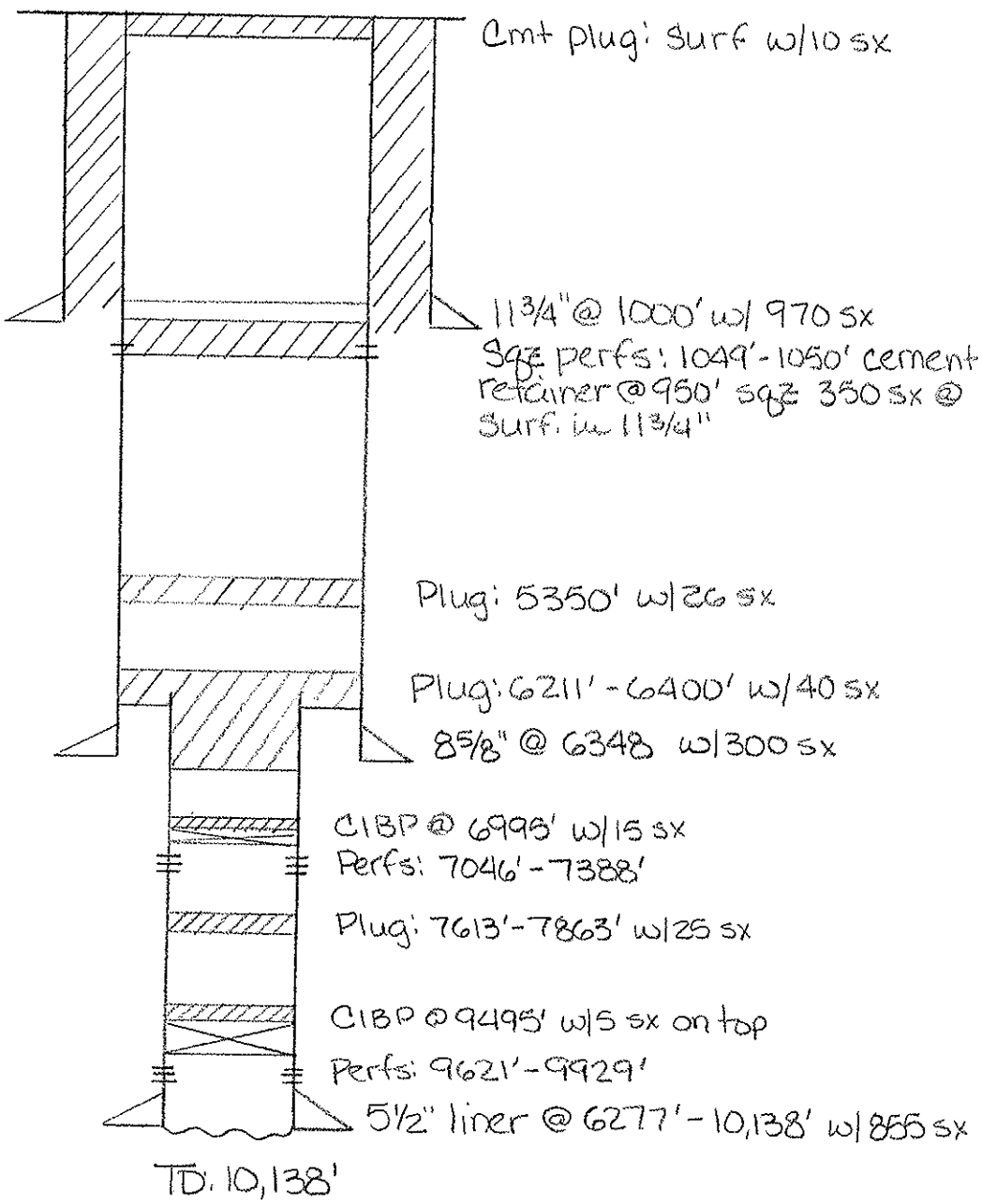
SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 40
Artificial Penetration Review

OPERATOR Pre-Ongard Well Op.
LEASE Pre-Ongard
WELL NUMBER 1
DRILLED NA
PLUGGED NA

STATUS Plugged
LOCATION Sec. 11 -T18S-R27E
MUD FILLED BOREHOLE NA
TOP OF INJECTION ZONE 7070'
API NO. 30-015- 20510

REMARKS: Calculated Top of Cement behind 5½" liner @ 6277'



NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
AMOCO PRODUCTION COMPANY	MALCO "A" FEDERAL	3

Unit Letter	Section	Township	Range	County
F	11	18 SOUTH	27 EAST	EDDY

Actual Footage Location of Well: 1650 feet from the NORTH line and 1653 feet from the WEST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
-	Miss.	Wildcat	40 Acres

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

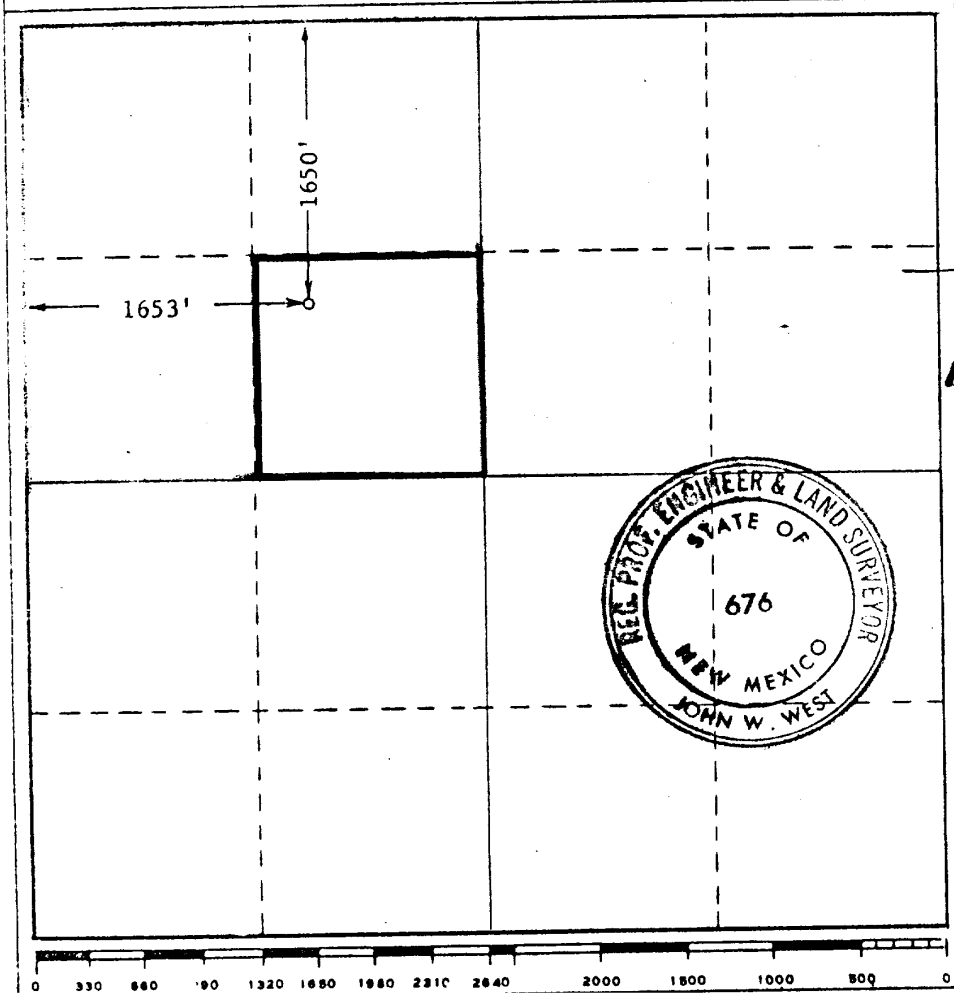
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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

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

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

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



CERTIFICATION

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

Name

Position
AREA SUPERINTENDENT

Company
Amoco Production Company

Date
SEP 27 1971

RECEIVED
OCT - 7 1971
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

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

Date Surveyed
SEPTEMBER 16, 1971

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. 676

RECEIVED

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

DEC 29 1972

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

API 30-015-20510

Operator	Lease	
AMOCO PRODUCTION COMPANY	MOLCO "S" FEDERAL	ARTESIA, OFFICE #1

Unit Letter	Section	Township	Range	County
F	11	18 SOUTH	27 EAST	EDDY

Actual Footage Location of Well:
1650 feet from the NORTH line and 1653 feet from the WEST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3587 RDB	MORROW-(PENN)	SCOGGIN DRAW-MORROW	320 Acres

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

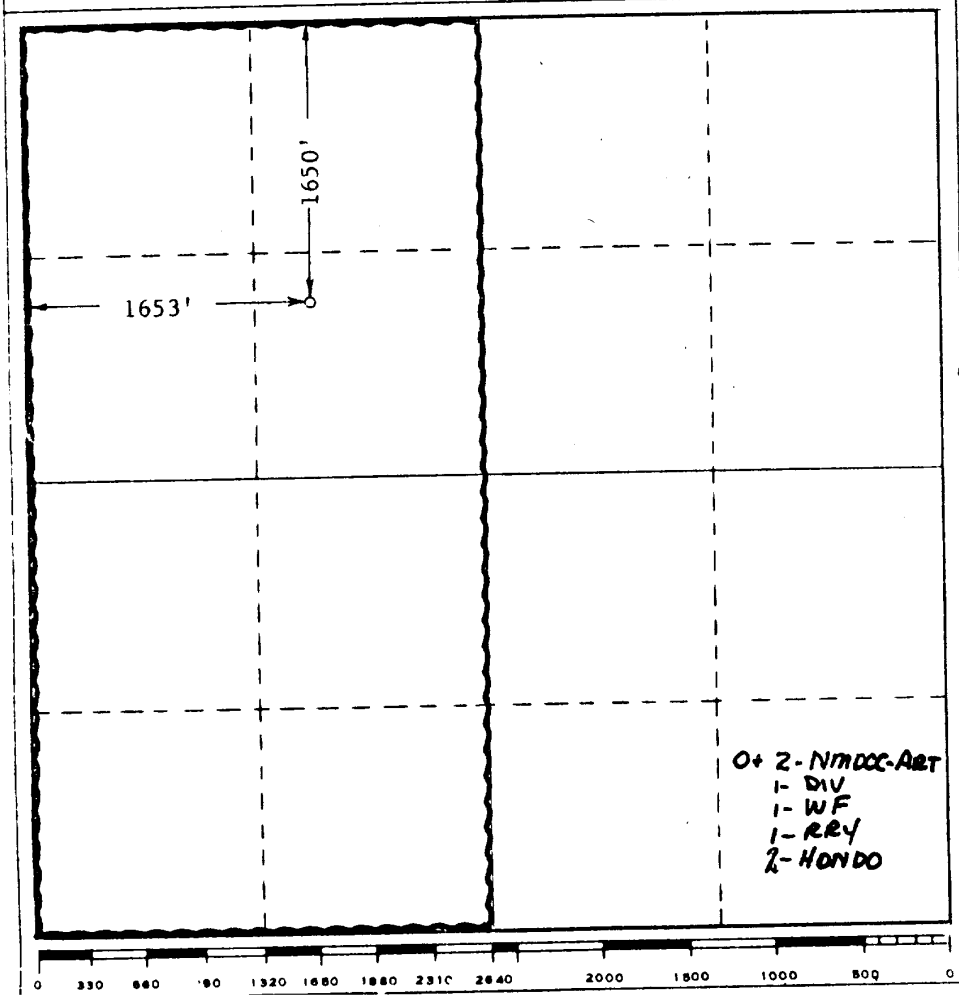
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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

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

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

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



CERTIFICATION

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

Name: [illegible]

Position: AREA ~~SUPERINTENDENT~~ Engineer

Company: Amoco Production Company

Date: 12-28-72

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

Date Surveyed: SEPTEMBER 16, 1971

Registered Professional Engineer and/or Land Surveyor: John W. West

Certificate No. 676

N. M. O. C. C. COPY

Form 9-331 C
(May 1963)

SUBMIT IN T LICATE*
(Other instru ns on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-20510

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED
OCT 8 1971
O. C. C.

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR: Amoco Production Company

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1650' FNL x 1653' FWL Sec. 11 (F, SE/4 NW/4)
At proposed prod. zone:

5. LEASE DESIGNATION AND SERIAL NO.: LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: MALCO A FEDERAL

9. WELL NO.: 3

10. FIELD AND POOL, OR WILDCAT: WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27 NMPM

12. COUNTY OR PARISH: EDDY

13. STATE: NM

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

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

16. NO. OF ACRES IN LEASE:

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

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

19. PROPOSED DEPTH: 10,500'

20. ROTARY OR CABLE TOOLS: ROTARY

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

22. APPROX. DATE WORK WILL START*:

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	11 3/4"	42-47#	1000'	Circ
11 "	8 5/8"	24-36#	6200'	Fill 600' above Abo
7 7/8"	5 1/2" LINER	14-17#	6200-TD	Squeeze behind liner.

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

RECEIVED
OCT - 7 1971
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

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

24.

SIGNED: TITLE: AREA SUPERINTENDENT DATE: 10-6-71

(This space for Federal or State office use)

PERMIT NO.: APPROVAL DATE:

APPROVED BY: TITLE: DATE:

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
OCT - 7 1971
R. L. BEEKMAN
ACTING DISTRICT ENGINEER

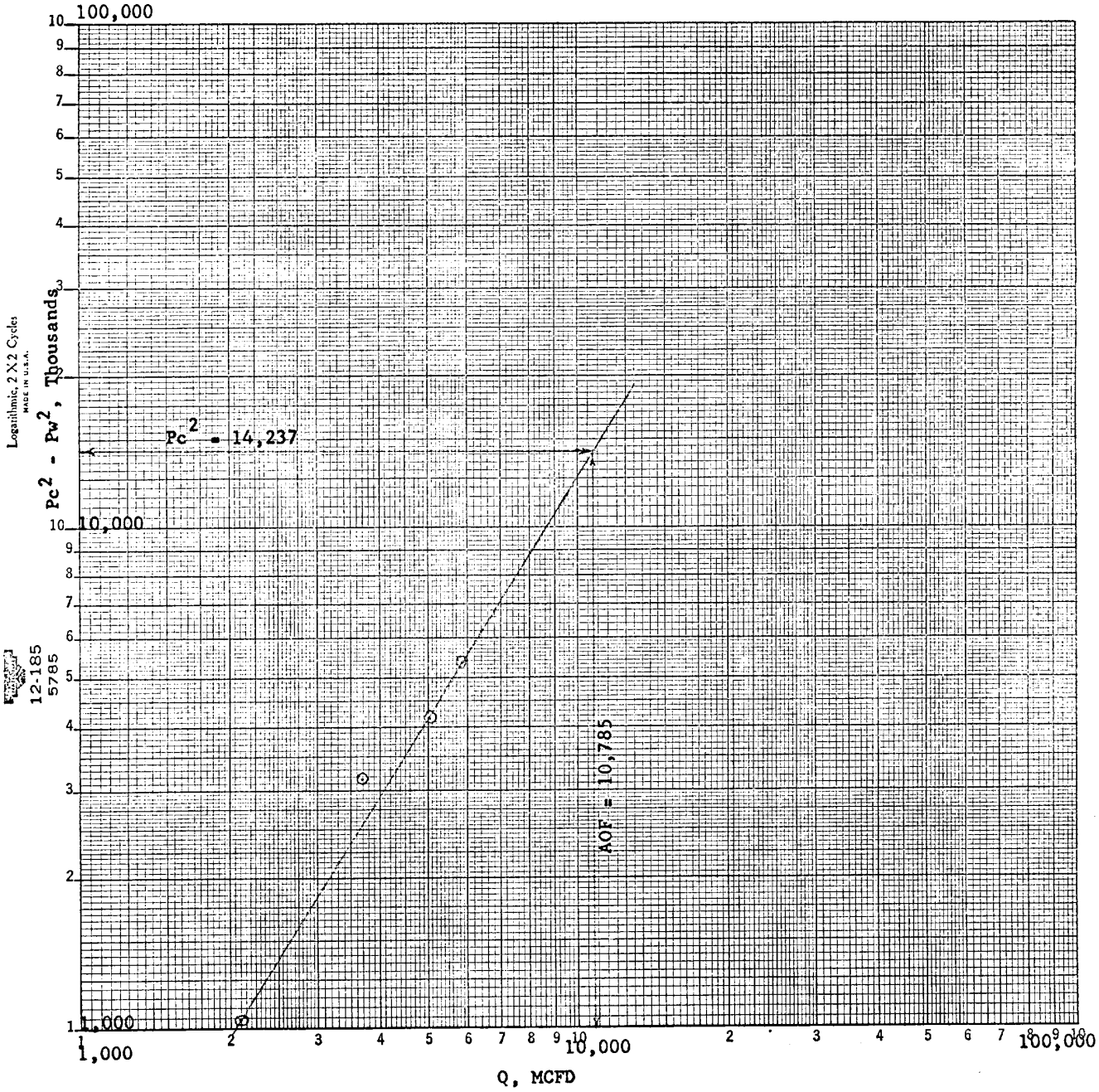
THIS APPROVAL IS RESCINDED IF OPERATIONS ARE NOT COMMENCED WITHIN 3 MONTHS.

EXPIRES JAN - 7 1972

Ok 4 - USGS - ART
1 - AC Jr
1 - SUSP
1 - RRY
1 - Arco - Roswell
Doug Kurzik

*See Instructions On Reverse Side

Amoco Production Company
Malco "S" Federal No. 3
F-11-18S-27E
12/22/71



NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
JAN 3 1972
O. C. C.
ARTESIA, OFFICE

Type Test: [x] Initial [/] Annual [ ] Special				Test Date: 12/22/71	
Company: Amoco Production Company		Connection: None			
Pool: Wildcat		Formation: Morrow Penn			Unit: API No. 30-015-20510
Completion Date: 12/18/71	Total Depth: 10,168	Plug Back TD: 10,000		Elevation: 3587 KDB	Farm or Lease Name: Malco "S" Federal #3
Csg. Size: Liner 5-1/2"	Wt.: 17#	d: 4.892	Set At: 6277' - 10,138	Perforations: From 9621 To 9929	Well No.: X #31
Tbg. Size: 2-3/8"	Wt.: 4.7	d: 1.995	Set At: 9504	Perforations: From Open End To	Unit: F Sec.: 11 Twp.: 18S Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single				Packer Set At: 9491'	County: Eddy
Producing Thru: 2-3/8" Tbg	Reservoir Temp. °F: 145@ 9775	Mean Annual Temp. °F: 60		Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9504	9504	0.630	0.38	0.31	0	-	6"	Flange

NO.	FLOW DATA: Prover Line Size x Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2862		Pkr	-	40 hrs
1.	6.065 x 2.500	565	5.3	110	2689	60	Pkr	-	1 hr
2.	6.065 x 2.500	560	16.0	97	2453	60	Pkr	-	1 hr
3.	6.065 x 2.500	590	27.5	87	2220	60	Pkr	-	1 hr
4.	6.065 x 2.500	600	36.0	81	2035	60	Pkr	-	1 hr
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	30.31	55.34	578.2	0.9551	1.260	1.038	2.096
2	30.31	95.76	573.2	0.9662	1.260	1.041	3.678
3	30.31	128.79	603.2	0.9750	1.260	1.048	5.026
4.	30.31	148.56	613.2	0.9804	1.260	1.049	5.836
5.							

NO.	P_t	Temp. °R	T_r	Z
1	0.86	570	1.57	0.928
2	0.85	557	1.53	0.922
3.	0.90	547	1.50	0.911
4.	0.91	541	1.49	0.908
5				

Gas Liquid Hydrocarbon Ratio 74,136 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 54.0 Deg.
Specific Gravity Separator Gas 0.630 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.670
Critical Pressure 673 P.S.I.A. 670 P.S.I.A.
Critical Temperature 364 R 381 R

*P_c 3773.2 P_c^2 14,237

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3632.8	13,197	1,040
2		3330.2	11,090	3,147
3		3173.2	10,069	4,168
4		2981.1	8,887	5,350
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.661$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.848$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^{n'} = 10.785$

Absolute Open Flow 10,785 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n 0.626

Remarks: * Pc measured with bottom hole pressure recorder

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Al Klaar	Ed Snook	Ed Snook

(Form C-123)
(Revised 7/1/52)

Copy to S F

REQUEST FOR THE EXTENSION OF AN EXISTING POOL

OR

THE CREATION OF A NEW POOL

TO: The Oil Conservation Commission
State of New Mexico

Date 2-10-, 19 72

The Amoco Production Company BOX 68, HOBBS, N. M. 88240 (Name of Operator) MALCO "S" Federal (Name of Lease)

1 (Well No.) Located 1650 feet from the NORTH line and 1653 feet

from the WEST line of 11 (Section) 18-S (Township) 27-E (Range)

is outside the boundaries of any pool producing from the same formation. On the basis of the information submitted herewith on form C-105, we hereby request that the

pool be extended to include the following described area

or that a new pool be created to include the following described area W/2 SEC. 11, T-18-S, R-27-E

Suggested name: SCOGGIN DRAW-PENN

Amoco Production Company
Operator

Name of Producing Formation: (MORROW)-PENN

AREA SUPERINTENDENT
Representative

RECEIVED
FEB 14 1972
O. C. C.
ARTESIA, OFFICE

DJI NMOCC-ART
1- DIV
1- WJ
1- HONDO

R-4291
Scoggin Draw Morrow
5-1-72

DONE at Santa Fe, New Mexico, on this 6th day of April, 1972.

A. L. PORTER, Jr.
Secretary-Director

ALP/DSN/dr

cc: Oil Conservation Commission - Artesia
Oil & Gas Engineering Committee - Hobbs
United States Geological Survey - Roswell

OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

RECEIVED
APR 7 1972
O. C. C.
ARTESIA, OFFICE

April 6, 1972

Amoco Production Company
P. O. Box 68
Hobbs, New Mexico 88240

Attention: Mr. V. E. Staley

COMMINGLING ORDER PLC-43

Gentlemen:

The above-named company is hereby authorized to commingle Empire Abo oil and undesignated Morrow gas pool distillate pool production from the following leases:

Lease Name	Acreage Description
Malco H Federal R/A A	NE/4 SE/4 Sec. 3-18-27
Malco D Federal R/A A	N/2 NE/4 Sec. 10-18-27
Malco D Federal R/A B	S/2 NE/4 Sec. 10-18-27
Malco E Federal R/A A	SE/4 SE/4 Sec. 3-18-27
Malco E Federal R/A B	SW/4 SE/4 Sec. 3-18-27
Malco A Federal	E/2 NW/4 Sec. 11-18-27
Malco B Federal	W/2 NW/4 Sec. 11-18-27
Malco C Federal	W/2 NE/4 Sec. 11-18-27
Malco J Federal	E/2 NE/4 Sec. 11-18-27

Production shall be allocated by separately metering the oil production from each of the above leases and separately metering the distillate production from the Malco "S" Federal Well No. 1 prior to commingling.

This installation shall be installed and operated in accordance with the applicable provisions of Rule 309-B of the Commission Rules and Regulations and the Commission "Manual for the Installation and Operation of Commingling Facilities." It is the responsibility of the producer to notify the transporter of this commingling authority.

Commission Order No. R-1399, which authorized commingling of all of the above production except the Morrow distillate, is hereby put in abeyance.

NEW MEXICO OIL CONSERVATION COMMISSION

Artesia, New Mexico

May 9, 1972

Amoco Production Company
P. O. Box 68
Hobbs, New Mexico 88240

Re: Wells placed in pools

Gentlemen:

As the result of Commission Order R-4291 the following described well (~~s~~) (has-~~have~~) been placed in the pool (~~s~~) shown below. This change in nomenclature has been made in our files. Please change your records to reflect the proper pool name. All subsequent reports must show this nomenclature until further notice.

Scoggin Draw Morrow
Malco "S" Federal #1-F, 11-18-27

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

Very truly yours,

OIL CONSERVATION COMMISSION

Dist.
Orig. Operator
cc: Each transporter

Amoco Production Company
Post Office Box 68
Hobbs, New Mexico, 88240

March 19, 1973

File: VES-86-680 x WF

Re: Back Pressure Test
Amoco's Malco "S" Federal No. 1
F-11-18-27
Eddy County, New Mexico

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

Gentlemen:

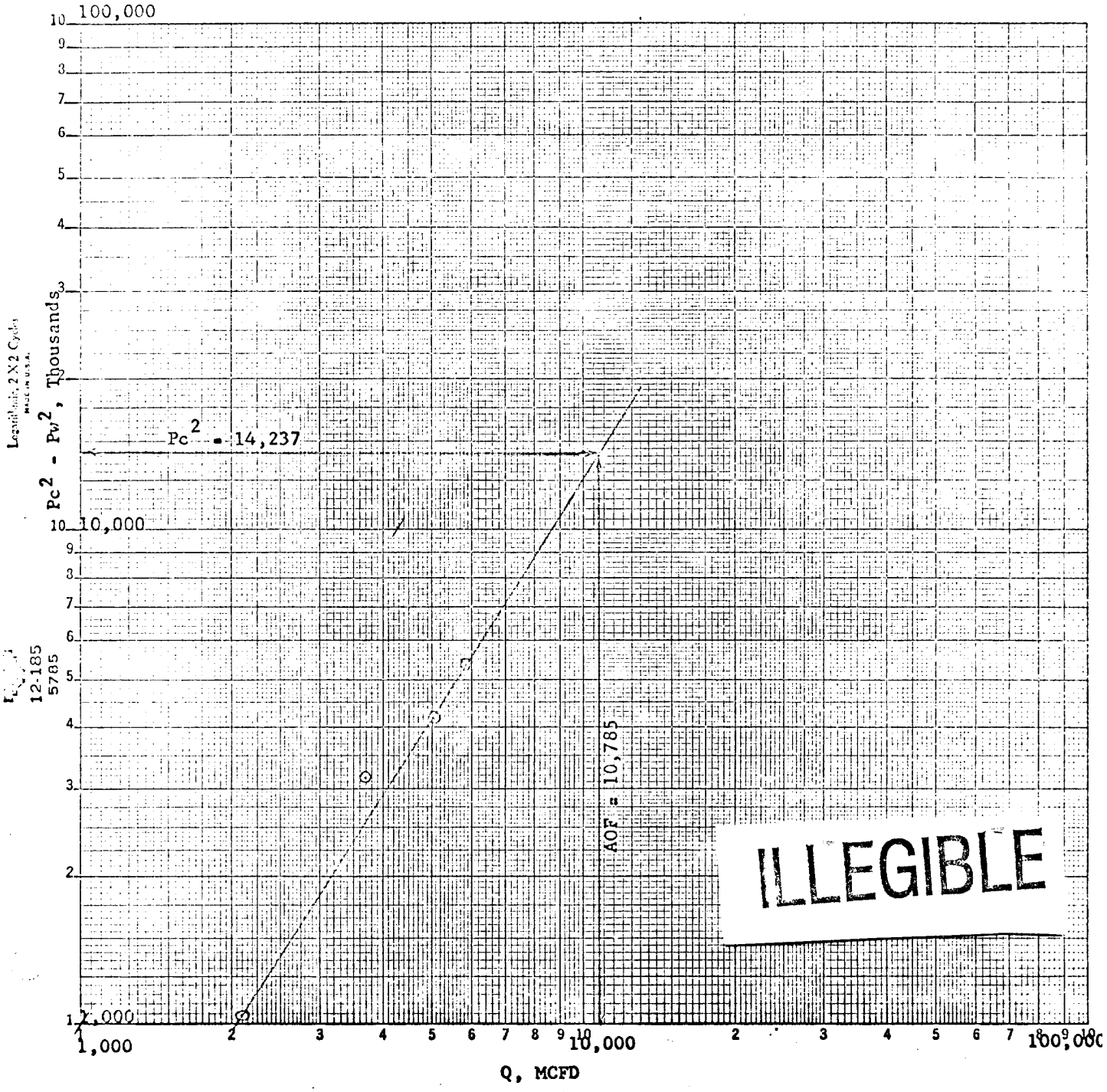
Attached herewith is a One Point Back Pressure Test on Amoco's Malco "S" Federal No. 1, F-11-18-27, Eddy County, New Mexico. Due to a drastic decline in reservoir pressure and low producing rates, it was not feasible to take a Four Point test on this well and the One Point test submitted is based on the maximum flow rate at existing sales line pressures and the slope of the original Four Point test submitted December 28, 1971. As can be seen from the reservoir pressure and cumulative production of 104 MMCF to the last test period, the well is on a rapid decline. We trust these data will fill your requirements for a back pressure test.

Yours very truly,

V. E. STALEY
Area Superintendent

Attachments

moco Production Company
alco "S" Federal No. 1
F-11-18S-27E
12/22/71



EW MEXICO OIL CONSERVATION CC SSION

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

MAR 20 1973

O. C. C.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special		Test Date: 12/22/71	
Company: Amoco Production Company	Connection: None		
Pool: Wildcat	Formation: Morrow Penn		Unit: API No. 30-015-20510
Completion Date: 12/13/71	Total Depth: 10,168	Plug Back TD: 10,000	Elevation: 3587 KDB
Farm or Lease Name: Malco "S" Federal			
Cas. Size: Liner 5-1/2"	Wt.: 17#	d: 4.892	Set At: 5277' 10,133
Perforations: From 9621 To 9929	Well No.: 1		
Tbg. Size: 2-3/8"	Wt.: 4.7	d: 1.995	Set At: 9504
Perforations: From Open End To	Unit: F	Sec.: 11	Twp.: 18S	Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 9491'	County: Eddy	
Producing Thru: 2-3/8" Tbg.	Reservoir Temp. °F: 145 @ 9775	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9504	9504	0.630	0.38	0.31	0	-	6"	Flange

NO.	FLOW DATA: Prover Line Size x Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2862		Pkr	-	40 hrs
1.	6.065 x 2.500	565	5.3	110	2689	60	Pkr	-	1 hr
2.	6.065 x 2.500	560	16.0	97	2453	60	Pkr	-	1 hr
3.	6.065 x 2.500	590	27.5	87	2220	60	Pkr	-	1 hr
4.	6.065 x 2.500	600	36.0	81	2035	60	Pkr	-	1 hr
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	38.31	55.34	573.2	0.9551	1.260	1.033	2.096
2	38.31	95.76	573.2	0.9662	1.260	1.041	3.678
3	38.31	128.79	603.2	0.9750	1.260	1.048	5.026
4	38.31	148.56	613.2	0.9804	1.260	1.049	5.836
5							

NO.	P_t	Temp. °R	T_r	Z
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2	0.35	557	1.53	0.922
3	0.35	567	1.50	0.911
4	0.35	541	1.49	0.903
5				

Gas Liquid Hydrocarbon Ratio 74,133 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 54.0 Deg.
Specific Gravity Separator Gas 0.630 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.670
Critical Pressure 673 P.S.I.A. 670 P.S.I.A.
Critical Temperature 364 R 381 R

P_c 3773.2 P_c^2 14,237

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2		3330.2	11,090	3,147
3		3173.2	10,069	4,168
4		2981.1	8,887	5,350
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.661$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.848$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 10,785$

Absolute Open Flow 10,785 Mcfd @ 15.025 | Angle of Slope θ | Slope, n 0.629

Remarks: Was measured with bottom hole pressure recorder

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Al Klear	Ed Snook	Ed Snook

NO. OF COPIES RECEIVED		5	
DISTRIBUTION			
SANTA FE		/	
FILE		/	✓
U.S.G.S.			
LAND OFFICE			
TRANSPORTER	OIL	/	
	GAS	/	
OPERATOR		/	
PRORATION OFFICE			

NEW MEXICO OIL CONSERVATION COMMISSION

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

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

RECEIVED
SEP 13 1976
O. C. C.
ARTESIA, OFFICE

I.

Operator: AMOCO PRODUCTION COMPANY ✓

Address: P.O. DRAWER A, LEVELLAND, TEXAS 79336

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

- New Well ☐
- Recompletion ☐
- Change in Ownership ☐
- Change in Transporter of: Oil ☐ Dry Gas ☒ Casinghead Gas ☐ Condensate ☐

Other *(Please explain)* Eff 8-1-76
FROM: AMOCO PRODUCTION COMPANY
TO: GAS COMPANY of NEW MEXICO

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
MALCO "S" FEDERAL	1	SCOGGIN DRAW-MORROW Gas	State, Federal or Fee FEDERAL	LC-067858

Location: Unit Letter F ; 1650 Feet From The NORTH Line and 1653 Feet From The WEST

Line of Section 11 Township 18-S Range 27-E , NMPM, EDDY County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☐ or Condensate ☒: AMOCO PRODUCTION COMPANY - TRUCKS

Address *(Give address to which approved copy of this form is to be sent)*: Box 1183 · HOUSTON, TEXAS 77001

Name of Authorized Transporter of Casinghead Gas ☐ or Dry Gas ☐: GAS COMPANY OF NEW MEXICO

Address *(Give address to which approved copy of this form is to be sent)*: FIRST INTERNATIONAL Bldg. SUITE 1800 DALLAS, TX 75270

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	F	11	18	27	YES	12-27-72

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

IV. COMPLETION DATA

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

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

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE

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

OIL WELL

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

GAS WELL

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

VI. CERTIFICATE OF COMPLIANCE

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

OIL CONSERVATION COMMISSION

APPROVED SEP 14 1976, 19 _____

BY W. A. Gressett

TITLE SUPERVISOR, DISTRICT II

0+4-NMOCC-ART	Ray W. Cox (Signature)
1-Div	Administrative Assistant (Title)
1-JMG	
1-Hondo	9-3-76 (Date)
1-Susp	
1-RL	

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

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

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

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

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

NO. OF COPIES RECEIVED		5	
DISTRIBUTION			
SANTA FE		1	
FILE		1	✓
U.S.G.S.			
LAND OFFICE			
TRANSPORTER	OIL	1	
	GAS	1	
OPERATOR		1	
PRORATION OFFICE			

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

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

RECEIVED
JAN 28 1977
O. C. C.
ARTESIA, OFFICE

Operator
AMOCO PRODUCTION COMPANY

Address
P.O. Drawer A, Levelland, Texas 79336

Reason(s) for filing *(Check proper box)*
New Well ☐
Recompletion ☐
Change in Ownership ☐
Change in Transporter of:
Oil ☐ Dry Gas ☒
Casinghead Gas ☐ Condensate ☐

Other *(Please explain)* Eff. 8-1-76
From: Gas Company of New Mexico
To: Amoco Produciton Company

If change of ownership give name and address of previous owner _____

DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Malco "S" Federal	1	Scoggin Draw-Morrow	State, Federal or Fee Federal	LC-067858

Location
Unit Letter F ; 1650 Feet From The North Line and 1653 Feet From The West

Line of Section 11 Township 18-S Range 27-E , NMPM, Eddy County

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil ☐ or Condensate ☒
Amoco Production Company - Trucks
Address *(Give address to which approved copy of this form is to be sent)*
Box 1183, Houston, Texas 77001

Name of Authorized Transporter of Casinghead Gas ☐ or Dry Gas ☒
Amoco Production Company
Address *(Give address to which approved copy of this form is to be sent)*
P.O. Drawer A, Levelland, Texas 79336

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	F	11	18	27	Yes	12-27-72

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

COMPLETION DATA

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

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

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

TEST DATA AND REQUEST FOR ALLOWABLE
(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

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

Posted
ID. 3
Change 67
2-4-77

GAS WELL

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

CERTIFICATE OF COMPLIANCE

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

OIL CONSERVATION COMMISSION

APPROVED JAN 31 1977, 19 _____

BY W. A. Gressett

TITLE _____

Ray W Cox
(Signature)

Administrative Assistant
(Title)

1-26-77
(Date)

O&4 NMOCC-Art
1-Div
1-JMG
1-Hondo
1-Susp
1-RC

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

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

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

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

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

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Amoco Production Company

3. ADDRESS OF OPERATOR
P. O. Box 68, Hobbs, NM 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1650' FNL X 1653' FWL, Unit F
AT TOP PROD. INTERVAL: Sec. 11, T-18-S, R-27-E
AT TOTAL DEPTH:

5. LEASE
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Malco "S" Federal

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Scoggin Draw - Morrow Gas

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

12. COUNTY OR PARISH: Eddy
13. STATE: NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
3587' RDB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☒	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

RECEIVED DEC 24 1981 OIL & GAS U.S. GEOLOGICAL SURVEY ROSWELL, NEW MEXICO

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

Propose to acidize to increase production as follows: Install Tree Saver. Acidize with 8000 gal. 7-1/2% HCL NEFE acid staged with 150 ball sealers at a rate of 3-5 BPM as follows: (a) Run gamma ray-temp base log; (b) Pump 2000 gal. of acid; (c) inject 25 ball sealers; (d) Pump 1000 gall of acid (e) Repeat (c) and (d) until all acid is pumped; (f) Flush with 37 bbl. of treated 2% KCL water; (g) Run after job gamma ray-temp. treatment evaluation log; and (h) Swab back to recover load. Place well back on production.

0+4- USGS, A 1-Hou 1-Susp 1-CLF

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Cathy L. Forman TITLE Ast. Adm. Analyst DATE 12-21-81

(This space for Federal or State office use)

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

APPROVED
DEC 28 1981
for JAMES A. GILLHAM
DISTRICT SUPERVISOR

*See Instructions on Reverse Side

NM OIL CON COMMISSION
Drawer DD
Artesia, NM 88210

c/SF

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
DEC 9 1982
OCD
ARTESIA, OFFICE

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Amoco Production Company

3. ADDRESS OF OPERATOR
P. O. Box 68, Hobbs, NM 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1650' FNL X 1653' FWL, Unit F
AT TOP PROD. INTERVAL: Sec. 11, T-18-S, R-27-E
AT TOTAL DEPTH:

5. LEASE
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Malco "S" Federal

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Scoggin Draw Morrow Gas

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

12. COUNTY OR PARISH
Eddy

13. STATE
NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
3587' RDB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☒	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

RECEIVED
DEC 3 1982
OIL & GAS
MINERALS MGMT. SERVICE
ROSWELL, NEW MEXICO

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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

Propose to fracture stimulate Morrow interval 9621'-9929' (non-continuous) as follows: Pull tubing and packer. Set a packer at apx. 9520'. Fracture stimulate with 20000 gal 40# gelled 2% KCl water commingled with 10000 gal CO2 carrying 20500# 20/40 sand. Flush with 3000 gal 2% KCl brine water and 1000 gal CO2. Flow and kick off well. If well won't flow, pull packer and run 3 joints tubing as tailpipe with 1.81" profile nipple 1 joint off bottom, landing tubing at apx. 9530'. Set a packer in 5½" liner at apx. 9430'. Run on-off tool with 1.875" profile nipple in seal mandrel. Run 2-3/8" tubing to surface and hydro test tubing. Flow test and return well to production.

0+4-MMS,A 1-HOU 1-SUSP 1-CLF

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Cathy L. Forman TITLE Ast. Adm. Analyst DATE 11-30-82

(This space for Federal or State office use)

APPROVED BY (Orig. Sgd.) PETER W. CHESTER TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
DEC 8 1982
FOR
JAMES A. GILLHAM
DISTRICT SUPERVISOR

*See Instructions on Reverse Side

C/SF

RECEIVED BY
JAN 11 1985
O. C. D.
ARTESIA, OFFICE

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

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL ☐ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER Recomplete SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR: Amoco Production Company ✓

3. ADDRESS OF OPERATOR: P.O. Box 68, Hobbs NM 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1650' FNL x 1653' FWL
At proposed prod. zone: (SE/4 NW/4 Unit F)

5. LEASE DESIGNATION AND SERIAL NO.: LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Malco S' Federal

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Chalk Bluff Wolfcamp

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27

12. COUNTY OR PARISH: Eddy

13. STATE: NM

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

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

16. NO. OF ACRES IN LEASE:

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

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

19. PROPOSED DEPTH: 7610'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3587 RDB

22. APPROX. DATE WORK WILL START*:

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15"	11 3/4"	47#	1000'	570 sks
11"	8 5/8"	32#	6348'	300 sks
7 7/8"	5 1/2" liner	17#	6277-10138'	855 sks

Propose to abandon the Morrow and recomplete to the Wolfcamp as follows:
1) POH with production equipment
2) RIH and set CIBP at 9500' and cap with 35' (5 sks) class 'H' neat cmt. Top of Morrow is at 9490'.
3) Spot a 250' (25 sx) class 'H' neat plug from 7860-7610. x Place mud between plugs
4) Run CBL from 7500-6500'.
5) If there is not a good cmt. bond between 7000'-7400' a supplemental procedure to

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

24.
SIGNED Gary C. Clark TITLE Asst. Admin. Analyst DATE 1-7-84

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY L Mark Hedley Acting TITLE DATE 1-9-85

CONDITIONS OF APPROVAL, IF ANY:
0+5 BLM, C 1-JRB 1-FJN 1-GCC 2-NMOCD, A

*See Instructions On Reverse Side

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

place cmt. behind pipe will be issued.

(6) Perforate Wolfcamp intervals 7046-62, 7090-7100, and 7382-88 w/4 DPJSPF using a 3 1/8" gun.

(7) RIH with RBP, tbg, and pkr. Set RBP at 7450', pkr. at 7280'.

(8) Swab and flow test well

(9) Stimulate Wolfcamp 7382-88' with 1000 gals 15% NEFE HCl gelled acid w/add. and 1000 gals non gelled 15% NEFE HCl w/add. Flush with 30 bbls fresh water.

(10) Swab and flow test well

(11) Release pkr, lower and latch onto RBP. Pull up RBP to 7200' and spot 10' sand on top. Set pkr at 6850'.

(12) Swab and flow test gross interval 7046'-7100'.

(13) Stimulate Wolfcamp 7046-62' and 7090-7100' as follows:

* Tag all acid w/RA material

a) Run before treatment GR Temp survey 7170'-6800'

b) Pump 4000 gals 15% NEFE HCl gelled acid w/add in 2 equal stages

c) Pump 1000 gals 15% NEFE HCl acid w/add

d) flush acid with 29 bbls fresh water

e) Run after treatment survey 7170'-6800'

(14) Swab and flow test well

(15) Release pkr and POH with RBP, pkr, and tbg.

(16) RIH with 2 3/8" tbg with seating nipple on bottom. Land tbg at 7450' and anchor at 7350'

(17) Run rods and pump and return well to production.

W MEXICO OIL CONSERVATION COMMI ON

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

Operator	Lease	Well No.
Amoco Production Company	Malco "S" Federal	1

Unit Letter	Section	Township	Range	County
F	11	18-S	27-E	Eddy

Actual Footage Location of Well: 1650 feet from the North line and 1653 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3587 RDB	Wolfcamp	Chalk Bluff Wolfcamp	40 Acres

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

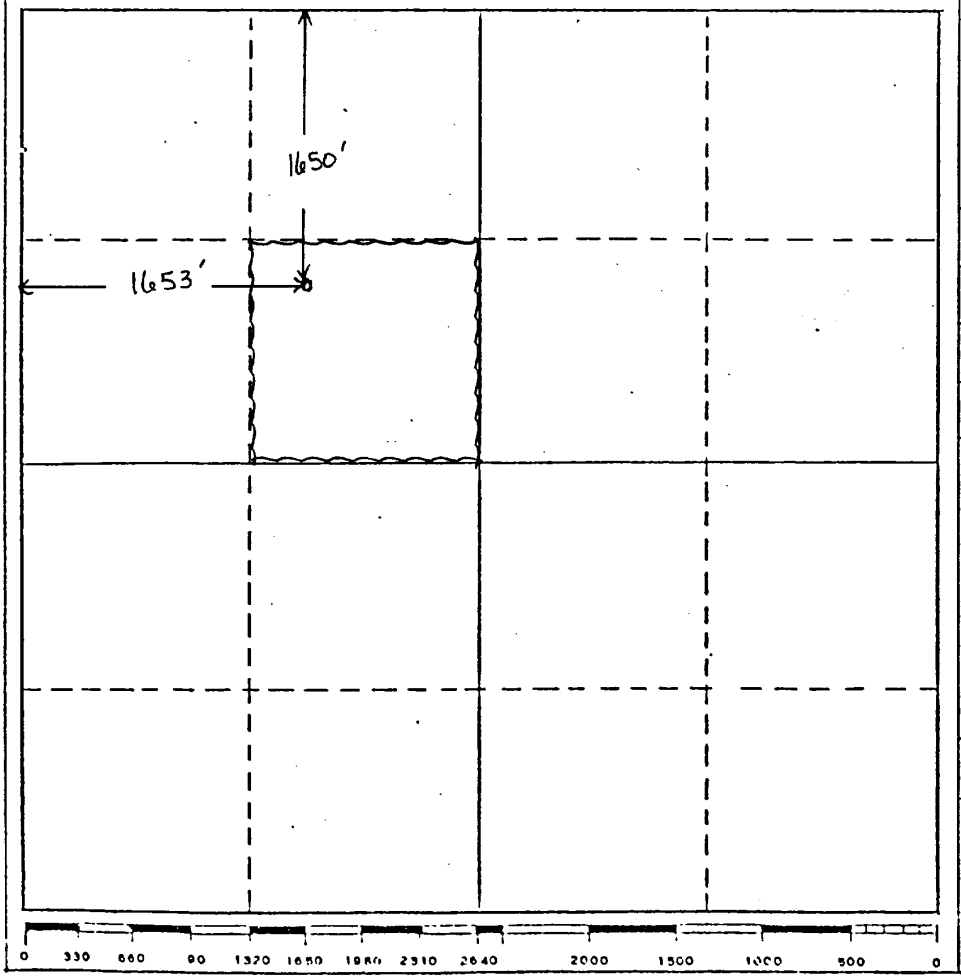
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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

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

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

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



CERTIFICATION

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

Name: Gary C. Clark

Position: Asst. Admin. Analyst

Company: Amoco Production Company

Date: 1-7-85

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

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

RECEIVED BY
MAR 1 1985
C. C. D.
ARTESIA, OFFICE

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	✓
FILE	✓
U.S.G.S.	
LAND OFFICE	
TRANSPORTER OIL	✓
TRANSPORTER GAS	
OPERATOR	✓
PRORATION OFFICE	

Form C-104
Revised 10-01-78
Format 06-01-83
Page 1

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator: Amoco Production Company ✓

Address: P.O. Box 68 Hobbs NM 88240

Reason(s) for filing (Check proper box)

- [ ] New Well
- [x] Recompletion
- [ ] Change in Ownership

Change in Transporter of:

- [ ] Oil
- [ ] Dry Gas
- [ ] Casinghead Gas
- [ ] Condensate

Other (Please explain): Request 1000 bbl testing allowable 7090' - 7388' (Wolfcamp perfs) FOR MARCH

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease (State, Federal or Fee)	Lease No.
Milo S' Federal	1	Chalk Bluff Wolfcamp	Federal	LC-067858

Location

Unit Letter F : 1650 Feet From The North Line and 1653 Feet From The West

Line of Section 11 Township 18-S Range 27-E , NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [x] or Condensate [ ]: The Permian Corporation Permian Corp. 9/1/87

Address (Give address to which approved copy of this form is to be sent): P.O. Box 1183, Houston, Tx 77001

Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [ ]: _____

Address (Give address to which approved copy of this form is to be sent): _____

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
					No	

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

NOTE: *Complete Parts IV and V on reverse side if necessary.*

VI. CERTIFICATE OF COMPLIANCE

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

Gary C. Clark
(Signature)
Asst. Admin Analyst
(Title)
3-1-85
(Date)

OIL CONSERVATION DIVISION

APPROVED MAR 6 1985, 19__

BY Original Signed By Leslie A. Clements

TITLE Supervisor District II

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

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

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

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

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

OPS NMOCD, A 1-JRB 1-FJN 1-GCC

IV. COMPLETION DATA

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

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

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE *(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)*

OIL WELL

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

GAS WELL

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

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

Drawer DD Artesia, NM.

DISTRICT OFFICE #2

Jan. thru Apr. 1985

NO. 2159 T

SUPPLEMENT TO THE OIL PRORATION SCHEDULE

DATE March 6, 1985

PURPOSE ALLOWABLE ASSIGNMENT - TESTING

Effective March 1, 1985 a testing allowable of 1000 barrels of oil is hereby assigned to Amoco Production Company, Malco "S" Federal #1-F-11-18-27 in the Chalk Bluff Wolfcamp Pool for the month of March, 1985.

LAC:fc

Amoco Prod. Co.

PER

OIL CONSERVATION DIVISION

DISTRICT SUPERVISOR

DISTRIBUTION: WHITE-OPERATOR. GREEN-TRANSPORTER. CANARY-OCC SANTA FE. PINK-OFFICE COPY. GOLDENROD-EXTRA COPY

Amoco Production Company

ENGINEERING CHART

SHEET NO. ___ OF ___

FILE

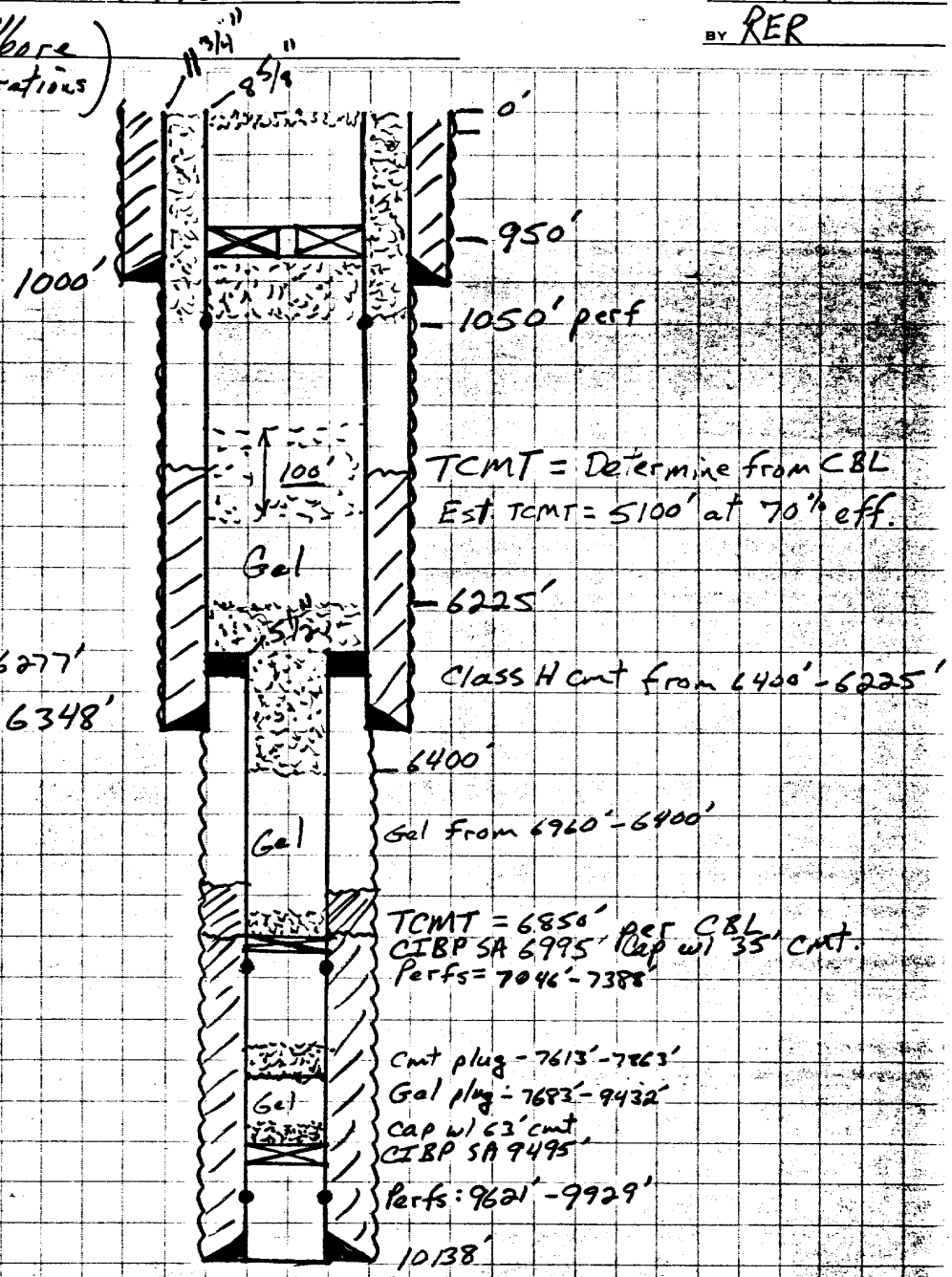
APPN

DATE 9/27/85

BY RER

SUBJECT Malco 'S' Federal No 1

(Proposed Wellbore after PxA operations)



Form 371 2-71

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

UNI D STATES
DEPARTMEN: OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPL TE* (Other instructions re- verse side)

District Office
Artesia, NM 88210

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

5. LEASE DESIGNATION AND SERIAL NO.
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

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

RECEIVED BY
NOV 15 1985
O. C. D.
ARTESIA, OFFICE

1. OIL WELL ☒ GAS WELL ☐ OTHER

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
AMOCO PRODUCTION COMPANY

8. FARM OR LEASE NAME
Malco "S" Federal

3. ADDRESS OF OPERATOR
P.O. BOX 68 HOBBS, NEW MEXICO 88240

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1650' FNL x 1653' FWL
(UNIT F, SE14, NW14)

10. FIELD AND POOL, OR WILDCAT
Chalk Bluff Wolfcamp

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

14. PERMIT NO.
3001520510

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3587' RDB

12. COUNTY OR PARISH
Eddy

13. STATE
NM

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

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

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

Propose to permanently Plug & Abandon as follows: Notify BLM prior commencing operations.

1. MISU and POH with rods, pump, and tubing.
2. RIH with CIBP and set at 6995'. Cap CIBP with 35' class H cement. Run CBL from 6000' to TCMT.
3. Displace hole from 6960' to surface with 9#/gal gelled brine (at least 25 sx gel/100 BBls brine).
4. Spot 32 SX class H Neat cement from 6400'-6225'. (Cover 8 5/8" csg. shoe and top of 5 1/2" liner.)
5. Spot 26 SX class C Neat cement (±100') across the TCMT found in step 2 above.
6. Perforate 8 5/8" casing from 1050'-1049' with 4 JSPF.
7. RIH with 8 5/8" cement retainer. Set retainer at ±950'. Sting into retainer and pump 300 SX class C Neat cement and circulate to surface thru 8 5/8" and 11 3/8" bradenhead outlet.
8. Spot 10 SX Class C Neat cement from 40' to Surface. Remove well head and install P&A Marker.

0 + 5 BLM, 1 - JRB, 1 - FJN, 1 - CMH

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

SIGNED Charles M. Terrill TITLE Administrative Analyst (SG) DATE 9/30/85

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE 11-14-85

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

N. M. O. C. C. COPY

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL ☐ GAS WELL ☐ OTHER DRILLING

2. NAME OF OPERATOR
[illegible] Production Company ✓

3. ADDRESS OF OPERATOR
[illegible] HOBBS, N. M. 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1650' FNL x 1653' FWL Sec 11 (Unit F, SE/4 NW/4)

5. LEASE DESIGNATION AND SERIAL NO.
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
MALCO "A" Federal

9. WELL NO.
3

10. FIELD AND POOL, OR WILDCAT
WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-18-27 NMPM

12. COUNTY OR PARISH
EDDY

13. STATE
NM

14. PERMIT NO.

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

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

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

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

Noble Drlg Co spudded 15" hole 2:30 PM 10-16-71. On 2-18-71, 11 3/4" OD 47# K-55 Casing was set @ 1000' w/ 970 Sx Incor + 2% CACL + 570# Tofplug. Cement circ. After WOC 18 hours. Tested csg w/ 1000 psi for 30 min. Test O.K.

Reduced hole to 11" @ 1000' and resumed drilling.

RECEIVED
OCT 22 1971
O. C. C.
ARTESIA, OFFICE

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

SIGNED _____ TITLE AREA SUPERINTENDENT DATE OCT 20 1971

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
OCT 21 1971
H. L. BEEKMAN
ACTING DISTRICT ENGINEER

Or 4- USGS-A
1- AC Jr
1- SUSP
2- HONDO-Roswell

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NO.: LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 1

1. OIL WELL ☐ GAS WELL ☐ OTHER: DRILLING

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Amoco Production Company

8. FARM OR LEASE NAME: MALCO "A" Federal

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

9. WELL NO.: 3

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1650' FNL x 1653' FWL Sec. 11 (F, SE/4 NW/4)

10. FIELD AND POOL, OR WILDCAT: WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27 NMPM

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3587' R. D. B.

12. COUNTY OR PARISH: EDDY

13. STATE: NM

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

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

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

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

On 11-9-71, 8 5/8" OD 24-36# Casing was set @ 6348' w/ 300 sx. Class H. neat. After WOC 18 hours, tested casing w/ 1500 psi for 30 min. Test O.K.

Reduced hole to 7 7/8" @ 6348' and resumed drilling.

RECEIVED
NOV 16 1971
O. C. C.
ARTESIA, OFFICE

RECEIVED
NOV 15 1971
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

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

SIGNED _____ TITLE AREA SUPERINTENDENT DATE NOV 11 1971

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
NOV 15 1971
H. L. BEEKMAN
ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

OJ 4- USGS-Art
1- DIV
1- SUSP
1- RRY
2- HONDO-Roswell

N. M. O. C. C. COPY

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424

5. LEASE DESIGNATION AND SERIAL NO.
LC-[illegible]

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

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

RECEIVED
JAN [illegible] 1972

1. OIL WELL ☐ GAS WELL ☐ OTHER

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
[illegible] Production Company

8. FARM OR LEASE NAME
[illegible] Federal

3. ADDRESS OF OPERATOR
[illegible], Roswell, N. M. 88240

9. WELL NO.
A 3

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1980' FNL & 1980' FWL Sec. 11 (F, SE/4 NW/4)

10. FIELD AND POOL, OR WILDCAT
[illegible]

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-16-27 NMPM

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3582' R.D.B.

12. COUNTY OR PARISH
Eddy

13. STATE
N.M.

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

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

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

On 11-7-71, 5½" Casing Liner set from 6277' to 10138' Cmt Cemented w/ 500 sx. Class H 4% Gel 3% KCl CFR-2 Plus 150 sx. Class H w/ 3% KCl CFR-2. Rev. 45 sx. Ran Temp Survey. Tested Casing w/ 2000 psi for 30 min. Test O.K. Lo. Top Liner w/ 125 sx Class H & 3% CFR-2. Pressured 2000 psi. OK. Perf 9521-27, 67-72, 82, 86 w/ 2 SPF.

Evaluating.

RECEIVED
DEC 29 1971
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

TD 10,138'

~~[illegible] from Molco A Federal [illegible]~~

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

SIGNED _____ TITLE AREA SUPERINTENDENT DATE _____

(This space for Federal or State office use)

APPROVED BY [signature] TITLE DISTRICT ENGINEER DATE DEC 29 1971
CONDITIONS OF APPROVAL, IF ANY:

Cy-4 USGS-Art
1-Div
1-Supr
1-File
2-Hobbs

*See Instructions on Reverse Side

Form 9-330
(Rev. 5-63)

N. M. O. C. C. COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

RECEIVED JAN 7 1972 O. C. C. ARTESIA, OFFICE

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

2. NAME OF OPERATOR: Amoco Production Company

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 1650' FNL x 1653' FWL Sec. 11 (7, SW/4 NW/4)
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: LC-067858
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: MALCO "A" FEDERAL
9. WELL NO.: 3
10. FIELD AND POOL, OR WILDCAT: Scoggin Draw-Morrow-Gas ~~WILDCAT~~ R-4291
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 5-1-72 11-18-27 NMPM
12. COUNTY OR PARISH: EDDY
13. STATE: N.M.
14. PERMIT NO. / DATE ISSUED:

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
10-16-71	12-5-71	12-20-71	3587 R.D.B.	—

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
10,168	10,000		→	0-TD	—

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 9621-9929'

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: GR-N, PROX, POROSITY, ETC.

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
11 3/4"	47#	1000'	15"	970 Sx	
8 5/8"	32#	6348'	11"	300 "	
5 1/2" LINER	17#	6277-10138'	7 7/8"	855 "	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8	9504	9491

31. PERFORATION RECORD (Interval, size and number)
9621-27', 67-72', 82', 86'
9735', 39', 42', 72', 75-84', 91-95'
9851-56', 58', 64', 66',
9929'
w/2JSPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
9735-9929'	300 gal 10% HCF x 3% HCL

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
12-16-71	FLW	SHUT-IN

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
1-2-72	4	VARIOUS	→	9.3	708	0	76 136

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
2035-2689	PKR	→	56	10 785 (AOF)	0	54°

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): TO BE SOLD - MARKET PENDING

TEST WITNESSED BY

35. LIST OF ATTACHMENTS: NONE

RECEIVED JAN-6 1972 U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

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

SIGNED: TITLE: AREA SUPERINTENDENT

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

03-USGS-ART
1-DIV
1-Well file
1-RBY
2-HOBBS

INSTRUCTIONS

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

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

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

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

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

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

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

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Penn Morrow	9621	9929	Gas and Dist Zone

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Queen	1020	
Grburg	1516	
San And	1887	
Yeso	3457	
Abo	5087	
Wolfcamp	8405	
Cisco	7745	
Canyon	8365	
Atoka	9277	
Chester	9960	

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

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

RECEIVED
FEB 3 1972
O. C. C.
ARTESIA, OFFICE

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR
[illegible] Production Company ✓

3. ADDRESS OF OPERATOR
[illegible], Roswell, N. M. 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1650' FNL x 1653' FWL Sec. 11 (Unit F, SE/4 NW/4)

5. LEASE DESIGNATION AND SERIAL NO.
LC-037688

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
MALCO "S" Federal

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Scott Draw Morrow-Gas
Wildcat R-4291
8-1-72

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
11-18-27 NMPM

12. COUNTY OR PARISH
EDDY

13. STATE
N.M.

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3587' RDB

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

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

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

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

Well name and number changed
From: MALCO "A" Federal Well No. 3
To: MALCO S Federal Well No. 1

Completion horizon and type well occasioned changes.

RECEIVED
JAN 21 1972
U. S. GEOLOGICAL SURVEY
ARTESIA

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

SIGNED [signature] TITLE AREA SUPERINTENDENT DATE JAN 19 1972

(This space for Federal or State office use)

APPROVED BY [signature] TITLE DISTRICT ENGINEER DATE FEB 2 1972

CONDITIONS OF APPROVAL, IF ANY:

ON 4- USGS- ART
1- DIV
1- DOSP
1- RRY
2- HONDO

*See Instructions on Reverse Side

NO. OF COPIES RECEIVED	5	
DISTRIBUTION		
SANTA FE	1	
FILE	1	✓
U.S.G.S.		
LAND OFFICE		
TRANSPORTER OIL	1	
TRANSPORTER GAS	1	
OPERATOR		
PRORATION OFFICE		

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS
(DEVIATION SURVEYS - BACK SIDE)

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

RECEIVED
DEC 29 1972
O. C. C.
ARTESIA, OFFICE

API-30-015-20510

I.

Operator: Amoco Production Company

Address: BOX 68, HOBBS, N. M. 88240

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

New Well [X]
Recompletion [ ]
Change in Ownership [ ]

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

Other *(Please explain)*

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
MALCO "S" FEDERAL	1	SCOGGIN DRAW-MORROW Gas	State, Federal or Fee FED	LC-067858

Location

Unit Letter F ; 1650 Feet From The NORTH Line and 1653 Feet From The WEST

Line of Section 11 Township 18-S Range 27-E , NMPM, EDDY County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [ ] or Condensate [X]	Address *(Give address to which approved copy of this form is to be sent)*
Amoco Production Company (Trucks)	P. O. Box 3119, Midland, Texas 79701
Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [X]	Address *(Give address to which approved copy of this form is to be sent)*
Amoco Production Company (DAU)	P. O. Box 68, Hobbs, New Mexico 88240

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	F	11	18-S	27-E	Yes	12-27-72

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

IV. COMPLETION DATA

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

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
10-16-71	12-20-71	10,168'	10,000'
Elevations *(DF, RKB, RT, GR, etc.)*	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
3587' RDB	Penn-Morrow	9,621	9,504'

Perforations: 9621'-27',67'-72', 82',86',9735',39',42',72',75'-84',91'-95',9851'-56', 58',64',66',9929'

Depth Casing Shoe: 10,138'

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
15"	11-3/4"	1000'	970 SX
11"	8-5/8"	6348'	300 SX
7-7/8"	5-1/2"	6277'-10138'	855 SX
	2 3/8"	9504 Pkr @ 9491	

V. TEST DATA AND REQUEST FOR ALLOWABLE

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

OIL WELL

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

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
AAOF - 10785	4 Hr.	12	54°
Testing Method *(pitot, back pr.)*	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
4 - Pt	2862	PKR	VARIOUS

VI. CERTIFICATE OF COMPLIANCE

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

OIL CONSERVATION COMMISSION

APPROVED DEC 29 1972, 19 _____

BY W. A. Gressett

0 & 4 - NMOCC-Art.
1 - Div
1 - JEL
1 - OBP
1 - Susp
1 - RRY
2 - Hondo

(Signature) AREA ~~SUPERINTENDENT~~

(Title) Engineer

(Date) 12-27-72

TITLE OIL AND GAS INSPECTOR

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

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

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

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

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

DEVIATION SURVEYS

DEPTH	DEGREES OFF
740	1/2
1300	1/4
1670	1/4
2040	1/4
2460	1/2
2790	1/2
2970	1-1/4
3500	3/4
4000	3/4
4560	1°
4890	1°
5100	1-1/4
5610	1
6020	2-1/2
6195	2-1/2
6345	2
6970	2-1/4
7510	1
8152	1-3/4
9430	3/4
10165	1

The above are true to the best of my knowledge.

James E. Tyler

AREA ~~SUPERINTENDENT~~ Engineer

Sworn to this date. December 27, 1972

D. L. Martin

NOTARY PUBLIC IN & FOR LEA COUNTY, NEW MEXICO

MY COMMISSION EXPIRES 6-15-76

NM OIL CONS. COMMISSION
1000 RD
ARTESIA, NM 88210

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Amoco Production Company

3. ADDRESS OF OPERATOR
P. O. Box 68, Hobbs, New Mexico 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1650' FNL x 1653' FWL, Unit F
AT TOP PROD. INTERVAL: Sec. 11, T-18-S, R-27-E
AT TOTAL DEPTH:

5. LEASE
LC-067858

RECEIVED
MAY - 6 1982
O. C. D.
ARTESIA, OFFICE

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Malco "S" Federal

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Scoggin Draw-Morrow Gas

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

12. COUNTY OR PARISH: Eddy
13. STATE: NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
3587' RDB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☒
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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

Moved in service unit 3-2-82. Ran swab for 8 hrs. with initial fluid level 2100 ft. from surface. Final fluid level 9400 ft. from surface. Ran gamma ray temp. log. Pumped 8000 gal 7-1/2% HCL NEFE acid with additives staged with 150 ball sealers. Ran after gamma ray and temp. treatment log. Ran swab with light show of gas. Moved out service unit 3-8-82. Flow tested for 48 hrs. and flowed 342 MCF. Returned well to production.

ACCEPTED FOR RECORD
APR 27 1982
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

0+4-USGS, A 1-Hou 1-Susp 1-CLF

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Cathy L. Forman TITLE Ast. Adm. Analyst DATE 3-16-82

(This space for Federal or State office use)

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

RECEIVED
MAR 22 1982
OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

*See Instructions on Reverse Side

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

c/SF

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Amoco Production Company

3. ADDRESS OF OPERATOR
P. O. Box 68, Hobbs, New Mexico 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1650' FNL x 1653' FWL, Unit F
AT TOP PROD. INTERVAL: Sec. 11, T-18-S, R-27-E
AT TOTAL DEPTH:

5. LEASE
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Malco "S" Federal

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Scoggin Draw-Morrow Gas

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

12. COUNTY OR PARISH: Eddy
13. STATE: NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
3587' RDB

RECEIVED
MAY - 4 1982
O. C. D.
ARTESIA, OFFICE

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☒
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

DISCLAIMER
APR 23 1982
OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

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

Moved in service unit 4-5-82. Swabbed 6 hrs. with initial fluid level 5000 ft. from surface. Final fluid level 9000 ft. from surface. Pumped 5500 gal XL-4 gel, 2750 gal CO_2, and 2310# 20/40 sand. Pumped 2500 gal XL-4 gel, 1-1/4 gal CO_2, and 2310# 20/40 sand. Flushed with 48 bbls 10# gel. Flow tested for 96 hrs. and flowed 12 BC, 12 BLW, 4 BW, and 3108 MCF. Returned well to production.

0+4-USGS, A 1-Hou 1-Susp 1-CLF

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Cathy L. Forman TITLE Ast. Adm. Analyst DATE 4-19-82

(This space for Federal or State office use)

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

ACCEPTED FOR RECORD
PETER W. CHESTER
MAY 3 1982
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

*See Instructions on Reverse Side

NM OIL CONS. COMMISSI
Drawer DD
Artesia, NM 88210

9/SF

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

RECEIVED
JUN 11 1983
O. C. D.
ARTESIA, OFFICE

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Amoco Production Company

3. ADDRESS OF OPERATOR
P. O. Box 68, Hobbs, New Mexico 88240

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1650' FNL X 1653' FWL, Unit F
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Malco "S" Federal

9. WELL NO.
1

10. FIELD OR WILDCAT NAME
Scoggin Draw Morrow Gas

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

12. COUNTY OR PARISH: Eddy
13. STATE: NM

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
3587' RDB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☒
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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

Moved in service unit 1-11-83. Killed well with 50 bbls 10# 2% KCL water. Pulled tubing and packer. Ran packer and 2-7/8" tubing and tested to 8000 psi. Packer set at 9515'. Fractured with 20,000 gal 40# gelled 2% KCL water and 10,000 gals. CO2 carrying 20,500# sand. Flushed with 71 bbl 10# 2% KCL water. Flowed well on 32/64" choke for 1/2 hrs. at 75 psi. Flowed 3 hrs. on 48/64" choke at 50 psi. Well died. Pulled tubing and packer. Ran 2-3/8" tubing, F-nipple, 2-3/8" tubing, packer, on-off tool and 2-3/8" tubing. Packer set at 9432' and tailpipe landed at 9527'. Swabbed 8 hrs. and recovered 60 BLW with Strong show of gas. Moved out service unit 1-16-83. Moved in and rigged up Swab unit 1-16-83. Swabbed 12 days. Moved out Swab unit 2-1-83. Connected well to gas sales line 2-2-83. Flowed 144 hrs. and produced 0 BF and 701 MCF. Last 24 hrs flowed 0 BF and 120 MCF. Returned well to production.

Subsurface Safety Valve: Manu. and Type 0+4-BLM, R, 1-HOU, 1-SUSP 1-CMH 1-W. Stafford, HOU Set @ _____ Ft.

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

SIGNED Charles M. Lewing TITLE Ast. Adm. Analyst DATE 6-1-83

(This space for Federal or State office use)

RECEIVED
JUN 6 1983
OIL & GAS
MINERALS MGMT. SERVICE
ROSWELL, NEW MEXICO

ACCEPTED FOR RECORD

APPROVED BY _____ TITLE _____ DATE FEB 16 1983
CONDITIONS OF APPROVAL, IF ANY:

JUL 7 1983

*See Instructions on Reverse Side
ROSWELL, NEW MEXICO

Artesia, NM 88210

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

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

C/SF

RECEIVED BY
FEB 28 1985
O. C. D.
ARTESIA, OFFICE

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NO.: LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1. OIL WELL ☐ GAS WELL ☒ OTHER Recompletion

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Amoco Production Company

8. FARM OR LEASE NAME: Malco S Federal

3. ADDRESS OF OPERATOR: P.O. Box 68, Hobbs, NM 88240

9. WELL NO.: 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1650'FNL X 1653'FWL (SE/4, NW/4, Unit F)

10. FIELD AND POOL, OR WILDCAT: Chalk Bluff Wolfcamp

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3587' RDB

12. COUNTY OR PARISH: Eddy

13. STATE: NM

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

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

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

MISU 1-21-85. Released pkr. and pulled tbg. Ran cast iron bridge plug and set at 9495'. Pumped 5 sx Class H cmt. Spotted gel plug 9432'-9683'. Spotted 25 sx Class H plug 7863'-7613'. Pulled tbg. Perf'd 7046'-7062', 7090'-7100', 7382'-7388' with 4 SPF. Ran tbg., pkr. and set retrievable bridge plug at 7444'. Pulled tbg. and set pkr. at 7280'. Swbd. Acidized with 1000 gals. 15% NEFE HCL and 1000 gals. 5% HCL. Swbd. Released pkr. and reset at 6842'. Tested pkr. to 500 PSI and OK. Set retrievable bridge plug at 7200'. Tested RBP to 500 PSI and OK. Swbd. Ran before-treatment survey and acidized with 5000 gals. gelled 15% NEFE HCL. Tagged Radio Active material. Ran after-treatment survey. Swbd. Released pkr. and pulled tbg. and ran retrievable head, seating nipple and tbg. to 7188'. Cleaned out sand to 7200'. Ran seating nipple,

D+5-BLM, C 1-JRB 1-FJN 1-GCC 2-NMOCD, A

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

SIGNED Bonita Coble TITLE Administrative Analyst DATE 2-22-85

(This space for Federal or State office use)

APPROVED BY ACCEPTED FOR RECORD TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

FEB 28 1985

Post ID 2
3-8-85
P+A Morrow

*See Instructions on Reverse Side

tail-pipe, tbg., and tbg. anchor. Seating nipple landed at 7441', and set tbg. anchor at 7005'. Ran rods and pmp. MOSU 1-30-85. Built wellhead and connected to flw line on 1-31-85. Began pmp testing 2-1-85. Pump tested approx. 8 days. Last 24 hrs. pmpd 0 BO X 180 BW X 0 MCF. MISU 2-11-85. Pulled rods and pmp. Pulled tbg. and ran pkr., seating nipple and tbg. Retrievable bridge plug set at 7150'. Tested RBP to 1000 PSI and OK. Set pkr. at 7073'. Swbd. Released pkr., ran tbg. and latched on to RBP. Pulled tbg. Ran Cast iron bridge plug and set at 7080'. Ran cmt. ret. and set at 6962'. Pumped 75 sx Class H Neat. Reversed out 5 sx cmt. POOH. Drilled out cmt. to 7070'. Ran tbg. and tagged cast iron bridge plug at 7080'. Pulled tbg., drill collar and bit. Ran cmt. retainer and set at 6955'. Squeezed 125 sx Class H cmt and 10 sx below retainer and 103 sx formation. Reversed out 12 sx and pulled tbg.

Form 3160-5
Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

C/SI

RECEIVED BY
MAR 13 1985
O. C. D.
ARTESIA, OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

5. LEASE DESIGNATION AND SERIAL NO.
LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL ☐ GAS WELL ☐ OTHER

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
Amoco Production Company ✓

8. FARM OR LEASE NAME
Malco 'S' Federal

3. ADDRESS OF OPERATOR
P.O. Box 68, Hobbs NM 88240

9. WELL NO.
1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1650' FNL X 1653' FWL
(Unit F, SE/4 NW/4)

10. FIELD AND POOL, OR WILDCAT
Chalk Bluff Wolfcamp

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

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3587' RDB

12. COUNTY OR PARISH
Eddy

13. STATE
NM

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

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

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

This is to inform you that production from pump testing began on the Malco 'S' Federal No. 1 2-26-85. Produced 9 BO, 150 bbls W, and 0 gas. The subject well is currently being recompleted from the Morrow to the Wolfcamp.

0+5 BLM,R 1-JRB 1-FJN 1-GCC cc-BLM,C

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

SIGNED Gary C. Clark TITLE Asst. Admin. Analyst DATE 2-27-85

(This space for Federal or State office use)

APPROVED BY ACCEPTED FOR RECORD TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

MAR 12 1985

*See Instructions on Reverse Side

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

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

RECEIVED BY
APR 12 1985
O. C. D.
ARTESIA, OFFICE

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

5. LEASE DESIGNATION AND SERIAL NO. LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL ☒ GAS WELL ☐ OTHER

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR: Amoco Production Company

8. FARM OR LEASE NAME: Molco "S" Federal

3. ADDRESS OF OPERATOR: P.O. Box 68, Hobbs NM 88240

9. WELL NO.: 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1650' FNL x 1653' FWL (Unit F, SE/4 NW/4)

10. FIELD AND POOL, OR WILDCAT: Chalk Bluff Wolfcamp

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3587' RDB

12. COUNTY OR PARISH: Eddy

13. STATE: NM

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

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

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

Drilled out cmt retainer to 7071' and pressure tested to 1000 psi for 30 min, OK. Drilled out and cleaned out to 7504'. Circulated clean and POH. Ran production equipment, tail pipe landed at 7432'. Began pump testing 2-23-85. Pump tested apx 20 days, last 24 hrs pumped 0 BO, 110 BW, and 0 MCF. Well is currently shut in for evaluation.

0+5 BLM, C 1-JRB 1-FJN 1-GCC

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

SIGNED Gary C. Clark TITLE Asst. Admin. Analyst DATE 4-2-85

(This space for Federal or State office use)

APPROVED BY ACCEPTED FOR RECORD TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

APR 11 1985

*See Instructions on Reverse Side

CARLSBAD, NEW MEXICO

Form 3160-4
(November 1983)
(formerly 3-330)

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

RECEIVED BY
MAY 13 1985
O.C.D.
ARTESIA, OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other
b. TYPE OF COMPLETION: NEW WELL [ ] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [X] DIFF. RESVR. [ ] Other

5. LEASE DESIGNATION AND SERIAL NO. LC-067858
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME: MALCO "S" FEDERAL
9. WELL NO. 1
10. FIELD AND POOL, OR WILDCAT: Chalk Bluff Wolfcamp
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 11-18-27

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY
3. ADDRESS OF OPERATOR: P.O. BOX 68 HOBBS, NM 88240
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface (1650' FNL X 1653' FWL (Unit F, SE/4 NW/4))
At top prod. interval reported below
At total depth

14. PERMIT NO. | DATE ISSUED
12. COUNTY OR PARISH: EDDY
13. STATE: N.M

15. DATE SPUDDED: 1-21-85 (O/C)
16. DATE T.D. REACHED
17. DATE COMPL. (Ready to prod.)
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 3587' RDB
19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD: 10,168'
21. PLUG, BACK T.D., MD & TVD: 7613'
22. IF MULTIPLE COMPL., HOW MANY*
23. INTERVALS DRILLED BY → ROTARY TOOLS | CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 7046'-7388' Wolfcamp
25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: CBL
27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
11-3/4"	47#	1000'	15"	970 SX	CIRC
8-5/8"	32#	6348'	11"	300 SX	UNKNOWN
5-1/2"	17#	6277'-10,138'	7 7/8"	855 SX	7165'

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)
7046'-62', 7090'-7100', 7382'-88'
W/ 4 DPJSPF (.380")

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7382'-88'	1000 Gal 15% NEFE HCL
7046'-7100'	4000 Gal Gelled 15% NEFE HCL W/ Ball Sealers and 1000 Gal 15% NEFE HCL

33.* PRODUCTION

DATE FIRST PRODUCTION: 2-26-85
PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): Pumping
WELL STATUS (Producing or shut-in): Shut-IN

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3-18-85	24		→	0			0

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
		→				

ACCEPTED FOR RECORD
MAY 10 1985
CARLSBAD, NEW MEXICO

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

35. LIST OF ATTACHMENTS
Logs Mailed 1-31-85

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

SIGNED [signature] TITLE Administrative Analyst DATE 6 MAY 1985

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

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

ATE RIM-C, 1-TPR, 1-FJN, 1-NIG

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

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

C/SF

SUNDRY NOTICES AND REPORTS ON WELLS

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

RECEIVED
MAR 17 1986
O. C. D.
ARTESIA, OFFICE

5. LEASE DESIGNATION AND SERIAL NO.: LC-067858

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1. OIL WELL ☐ GAS WELL ☐ OTHER PxA

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: AMOCO PRODUCTION COMPANY

8. FARM OR LEASE NAME: Malco "5" Federal

3. ADDRESS OF OPERATOR: P.O. BOX 68 HOBBS, NEW MEXICO 88240

9. WELL NO.: 1

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

1650' FNL x 1653' FWL
(UNIT F, SE/4, NW/4)

10. FIELD AND POOL, OR WILDCAT: Chalk Bluff Wolfcamp

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 11-18-27

14. PERMIT NO.: 3001520510

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3587' RDB

12. COUNTY OR PARISH: Eddy

13. STATE: NM

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

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

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

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

1. MIRU 11-25-85 and POH with rods, pump, and tubing.
2. Ran CIBP and set at 6995'.
3. Ran free point log.
4. RIH w/tubing to 6950' and pumped 80 BBls brine gel. Capped CIBP with 15 sx Class H cement.
5. Displaced hole with 150 BBL brine gel
6. Spotted 40 sx class H neat cement from 6400-6225'. WOC. Tagged cement at 6211'.
7. Pulled tubing to 5350' and pumped 26 sx class C cement. Displaced w/brine gel.
8. Perforated 1049-50' w/4 DPJ SPF. Established circulation out 11 3/4" casing.
9. Set cement retainer at 950'. Squeezed w/350 sx class C cement. Circulated 175 sx out 11 3/4" casing.

0 + 5 BLM-CA, 1 - JRB, 1 - FJN, 1- CMH

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

SIGNED Charles M. Herring TITLE Administrative Analyst (SG) DATE 12/5/85

(This space for Federal or State office use)

APPROVED BY [illegible] TITLE DATE 3-14-89
CONDITIONS OF APPROVAL, IF ANY:

Post ID-2
3-21-86
P+A

*See Instructions on Reverse Side

10. Spotted 10SX class C cement surface plug.
11. Installed dry hole marker and MOSU 12-3-85.

NEW MEXICO
OIL CONSERVATION DIVISION
P. O. DRAWER DD
ARTESIA, NM 88210

DATE December 15,1986

NOTICE OF GCNM'S GAS DISCONNECTION:

OPERATOR: Amoco Production Company

LEASE: Malco "S" Federal

WELL NUMBER: #1 WELL UNIT LETTER: F

SECTION: 11 TOWNSHIP: 18 RANGE: 27

POOL: ~~Scroggin Draw Morrow~~ Chalk Bluff Wolfcamp

DATE WELL DISCONNECTED: 12/15/86

GCNM'S STATION NUMBER: 1890-00

GAS COMPANY OF NEW MEXICO
TRANSPORTER

Grady L. Gist
GRADY L. GIST
GAS CONTROL SUPERVISOR

RECEIVED BY
JAN - 5 1987
O. C. D.
ARTESIA, OFFICE

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

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

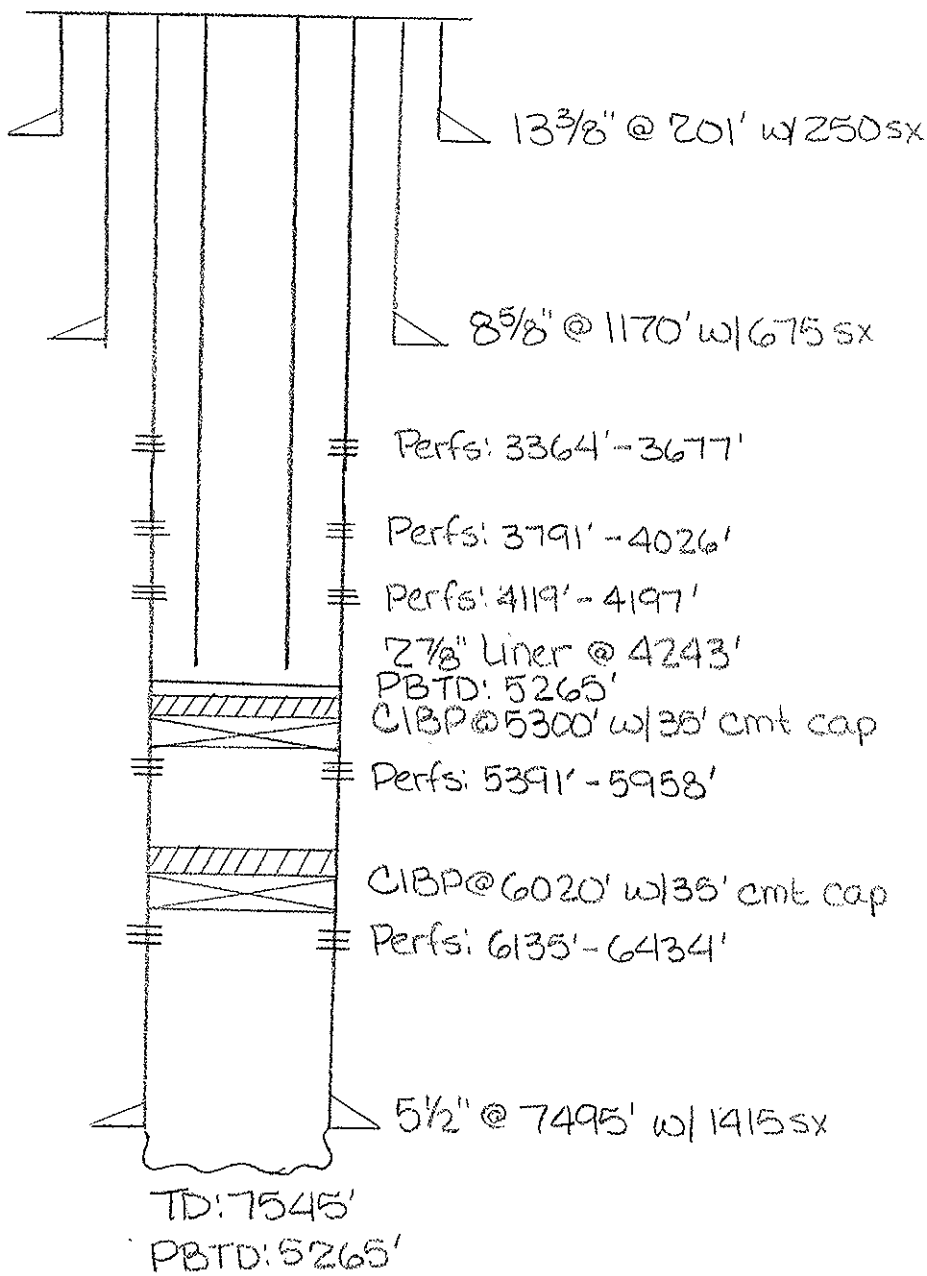
SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 65
Artificial Penetration Review

OPERATOR Mack Energy Corp
LEASE State H
WELL NUMBER 2
DRILLED 10-31-07
PLUGGED NA

STATUS Active Oil
LOCATION Sec. 2 -T18S-R27E
MUD FILLED BOREHOLE NA
TOP OF INJECTION ZONE ~7215
API NO. 30-015- 35814

REMARKS: Calc. Top of Cement behind 5½" @ surface.



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

Form C-101
Permit 60506

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

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

1. Operator Name and Address	2. OGRID Number
MACK ENERGY CORP PO BOX 960 ARTESIA , NM 88211	13837
	3. API Number 30-015-35814

4. Property Code	5. Property Name	6. Well No.
303847	STATE H	002

7. Surface Location

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

8. Pool Information

CHALK BLUFF; WOLFCAMP GAS	96963

Additional Well Information

9. Work Type	10. Well Type	11. Cable/Rotary	12. Lease Type	13. Ground Level Elevation
New Well	OIL		State	3590
14. Multiple	**15. Proposed Depth**	**16. Formation**	**17. Contractor**	**18. Spud Date**
N		Wolfcamp		9/20/2007

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water
50		

Pit: Liner: Synthetic ☐ mils thick Clay ☐ Pit Volume: bbls Drilling Method:
Closed Loop System ☒ Fresh Water ☐ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐

19. Proposed Casing and Cement Program

Type	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	8.625	24	360	400	0
Prod	7.875	5.5	17	7313	1300	0

Casing/Cement Program: Additional Comments

Mack Energy proposes to drill a 12 1/4 hole to 360', run 8 5/8 casing and cement. Drill a 7 7/8 hole to 7313', run 5 1/2 casing and cement. Note: On production string a fluid caliper will be run and will figure cement with 25% excess, attempt to circ.

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	2000	2000	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**	OIL CONSERVATION DIVISION
	Approved By: Bryan Arrant
Printed Name: Electronically filed by Jerry Sherrell	Title: Geologist
Title: Production Clerk	Approved Date: 9/19/2007 | Expiration Date: 9/19/2008
Email Address: jerrys@mackenergycorp.com	
Date: 9/11/2007 | Phone: 505-748-1288	Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(505) 393-6161 Fax:(505) 393-0720
District II
1301 W. Grand Ave., Artesia, NM 88210
Phone:(505) 748-1283 Fax:(505) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form C-102
Permit 60506

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name
30-015-35814	96963	CHALK BLUFF; WOLFCAMP GAS

4. Property Code	5. Property Name	6. Well No.
303847	STATE H	002

7. OGRID No.	8. Operator Name	9. Elevation
13837	MACK ENERGY CORP	3590

10. Surface Location

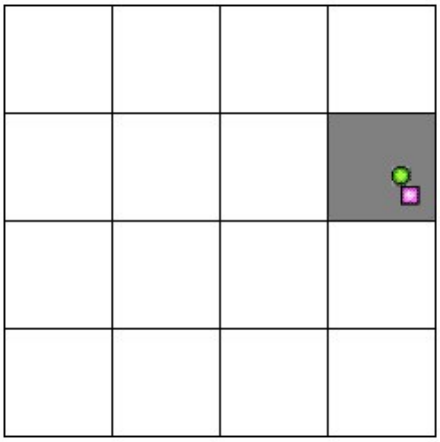
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
H	2	18S	27E		2063	N	441	E	EDDY

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
H	2	18S	27E	H	2300	N	340	E	EDDY

12. Dedicated Acres	13. Joint or Infill	14. Consolidation Code	15. Order No.
40.00			

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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

E-Signed By: Jerry Sherrell
Title: Production Clerk
Date: 9/11/2007

SURVEYOR CERTIFICATION

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

Surveyed By: Ronald Eidson
Date of Survey: 8/28/2007
Certificate Number: 3239

Permit Comments

Operator: MACK ENERGY CORP , 13837
Well: STATE H #002
API: 30-015-35814

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

Permit Conditions of Approval

Operator: MACK ENERGY CORP , 13837
Well: STATE H #002
API: 30-015-35814

OCD Reviewer	Condition
BArrant	Pit construction and closure must satisfy all requirements of your approved plan, O.C.D. Rule 19.15.2.50, and the Pit and Below-Grade Tank Guidelines
BArrant	As noted, operator to drill surface hole w/fresh water mud.
BArrant	Cement to cover all oil, gas and water bearing zones.

SEP 12 2007
OCD-ARTESIA

MACK Energy Corporation

30-015-35814

Mack Energy Corp.

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

Plan: Plan #1

Standard Planning Report

11 September, 2007

Scientific Drilling
Directional Drilling Operations

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well State H #2
Company:	Mack Energy Corp.	TVD Reference:	WELL @ 3606.00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	MD Reference:	WELL @ 3606.00ft (KB Elev)
Site:	State H #2	North Reference:	Grid
Well:	State H #2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project Eddy County, NM (NAD 27 NME)

Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site State H #2

Site Position:		Northing:	646,629.20ft	Latitude:	32° 46' 39.510 N
From:	Map	Easting:	528,184.50ft	Longitude:	104° 14' 29.874 W
Position Uncertainty:	0.00 ft	Slot Radius:	ft	Grid Convergence:	0.05 °

Well State H #2

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

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	9/11/2007	8.37	60.68	49,269

Design Plan #1

Audit Notes:

Version:		Phase:	PLAN	Tie On Depth:	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	156.92

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	
460 00	0.00	0.00	460.00	0.00	0.00	0.00	0.00	0.00	0 00	
768.78	6.18	156.92	768.18	-15.29	6.52	2 00	2 00	0 00	156 92	
2,854.52	6 18	156 92	2,841.82	-221 71	94.48	0.00	0.00	0.00	0 00	
3,163.30	0.00	0.00	3,150 00	-237 00	101 00	2.00	-2 00	0 00	180.00	
7,313 30	0.00	0 00	7,300.00	-237.00	101.00	0.00	0 00	0.00	0.00	PBHL-State H #1

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well State H #2
Company:	Mack Energy Corp.	**TVD Reference:**	WELL @ 3606.00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	**MD Reference:**	WELL @ 3606.00ft (KB Elev)
Site:	State H #2	**North Reference:**	Grid
Well:	State H #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0 00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0 00	0.00	0.00
200.00	0.00	0 00	200.00	0 00	0.00	0.00	0 00	0.00	0.00
300.00	0.00	0 00	300.00	0.00	0.00	0.00	0.00	0.00	0 00
400.00	0.00	0.00	400 00	0.00	0.00	0.00	0.00	0.00	0 00
460.00	0.00	0.00	460.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP 460' Start 2.0°/100'									
500 00	0.80	156 92	500.00	-0.26	0.11	0.28	2.00	2.00	0.00
600.00	2.80	156.92	599 94	-3.15	1 34	3.42	2.00	2.00	0.00
700 00	4.80	156.92	699.72	-9.24	3.94	10 05	2 00	2.00	0.00
768 78	6.18	156.92	768.18	-15.29	6.52	16 62	2 00	2 00	0.00
EOC hold 6.18°									
800.00	6.18	156.92	799.22	-18.38	7 83	19 98	0.00	0.00	0.00
900.00	6 18	156.92	898.64	-28.28	12.05	30 74	0.00	0.00	0.00
1,000 00	6.18	156.92	998.06	-38.18	16.27	41.50	0.00	0.00	0.00
1,100.00	6.18	156 92	1,097.48	-48.07	20 49	52.26	0.00	0.00	0.00
1,200.00	6.18	156 92	1,196.90	-57 97	24.70	63.01	0.00	0 00	0.00
1,300.00	6.18	156.92	1,296.32	-67.87	28 92	73.77	0 00	0.00	0.00
1,400.00	6.18	156.92	1,395 74	-77.76	33.14	84.53	0 00	0.00	0.00
1,500 00	6.18	156.92	1,495 16	-87.66	37.36	95.29	0 00	0 00	0.00
1,600.00	6 18	156 92	1,594.58	-97.55	41 57	106.04	0.00	0.00	0.00
1,700.00	6.18	156 92	1,694.00	-107.45	45.79	116.80	0.00	0 00	0.00
1,800.00	6.18	156.92	1,793 42	-117.35	50.01	127.56	0.00	0.00	0.00
1,900.00	6.18	156.92	1,892 84	-127.24	54.23	138.32	0.00	0.00	0.00
2,000.00	6.18	156.92	1,992.26	-137.14	58 44	149.07	0.00	0.00	0.00
2,100 00	6 18	156.92	2,091.68	-147.04	62 66	159.83	0.00	0.00	0.00
2,200.00	6.18	156.92	2,191.10	-156.93	66 88	170.59	0.00	0.00	0.00
2,300.00	6.18	156.92	2,290.52	-166 83	71.10	181.35	0.00	0.00	0.00
2,400.00	6.18	156.92	2,389.94	-176.73	75.31	192.10	0.00	0.00	0.00
2,500.00	6.18	156.92	2,489.36	-186.62	79 53	202 86	0.00	0.00	0.00
2,600.00	6 18	156.92	2,588 78	-196.52	83.75	213.62	0.00	0.00	0.00
2,700.00	6.18	156.92	2,688.20	-206.41	87.97	224.38	0.00	0.00	0 00
2,800.00	6 18	156.92	2,787.62	-216.31	92.18	235.13	0.00	0.00	0.00
2,854.52	6 18	156 92	2,841.82	-221.71	94.48	241.00	0.00	0.00	0.00
Start Drop 2.0°/100'									
2,900.00	5.27	156.92	2,887.07	-225.88	96.26	245.53	2.00	-2.00	0.00
3,000.00	3.27	156.92	2,986 79	-232.72	99.18	252.97	2.00	-2.00	0.00
3,100.00	1.27	156.92	3,086.71	-236.36	100.73	256.92	2.00	-2.00	0.00
3,163.30	0 00	0.00	3,150.00	-237.00	101.00	257.62	2.00	-2 00	0.00
EOC hold 0.0°									
3,200 00	0.00	0 00	3,186.70	-237.00	101.00	257.62	0.00	0.00	0 00
3,300.00	0.00	0 00	3,286.70	-237.00	101.00	257.62	0.00	0.00	0 00
3,400.00	0 00	0.00	3,386.70	-237.00	101.00	257.62	0.00	0.00	0.00
3,500.00	0 00	0 00	3,486 70	-237.00	101.00	257.62	0.00	0.00	0 00
3,600.00	0.00	0 00	3,586 70	-237.00	101.00	257.62	0 00	0 00	0 00
3,700 00	0.00	0.00	3,686.70	-237.00	101 00	257.62	0 00	0.00	0.00
3,800.00	0.00	0 00	3,786.70	-237 00	101 00	257.62	0 00	0 00	0.00
3,900.00	0.00	0.00	3,886.70	-237.00	101.00	257.62	0 00	0 00	0.00
4,000.00	0.00	0 00	3,986 70	-237.00	101.00	257.62	0.00	0.00	0.00
4,100.00	0 00	0.00	4,086 70	-237.00	101.00	257.62	0.00	0.00	0 00
4,200.00	0.00	0 00	4,186.70	-237.00	101 00	257 62	0 00	0.00	0.00
4,300.00	0.00	0 00	4,286.70	-237.00	101.00	257 62	0 00	0 00	0.00
4,400.00	0 00	0.00	4,386.70	-237.00	101.00	257.62	0.00	0.00	0 00

Database:	EDM 2003 16 Single User Db	**Local Co-ordinate Reference:**	Well State H #2
Company:	Mack Energy Corp.	**TVD Reference:**	WELL @ 3606.00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	**MD Reference:**	WELL @ 3606.00ft (KB Elev)
Site:	State H #2	**North Reference:**	Grid
Well:	State H #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,500.00	0.00	0.00	4,486 70	-237.00	101.00	257.62	0.00	0.00	0.00
4,600.00	0.00	0.00	4,586.70	-237.00	101.00	257.62	0.00	0.00	0.00
4,700.00	0.00	0.00	4,686.70	-237.00	101.00	257 62	0.00	0.00	0.00
4,800.00	0.00	0.00	4,786 70	-237.00	101 00	257.62	0.00	0.00	0 00
4,900.00	0.00	0 00	4,886.70	-237 00	101.00	257.62	0.00	0.00	0.00
5,000.00	0.00	0.00	4,986.70	-237.00	101 00	257 62	0.00	0.00	0 00
5,100 00	0 00	0 00	5,086.70	-237.00	101 00	257.62	0 00	0.00	0.00
5,200 00	0 00	0 00	5,186.70	-237.00	101 00	257.62	0.00	0.00	0.00
5,300.00	0.00	0 00	5,286.70	-237.00	101 00	257 62	0.00	0.00	0.00
5,400 00	0 00	0.00	5,386 70	-237.00	101 00	257.62	0.00	0.00	0.00
5,500 00	0 00	0.00	5,486.70	-237.00	101.00	257.62	0.00	0.00	0.00
5,600.00	0.00	0.00	5,586.70	-237.00	101.00	257.62	0.00	0.00	0.00
5,700.00	0.00	0.00	5,686 70	-237.00	101.00	257.62	0.00	0.00	0 00
5,800.00	0 00	0.00	5,786 70	-237.00	101.00	257.62	0.00	0.00	0 00
5,900.00	0.00	0 00	5,886 70	-237.00	101 00	257.62	0 00	0.00	0.00
6,000 00	0 00	0.00	5,986 70	-237.00	101.00	257.62	0.00	0 00	0 00
6,100.00	0.00	0.00	6,086 70	-237.00	101.00	257.62	0.00	0.00	0 00
6,200.00	0 00	0 00	6,186.70	-237.00	101.00	257 62	0 00	0.00	0.00
6,300.00	0.00	0.00	6,286.70	-237 00	101.00	257.62	0 00	0.00	0.00
6,400.00	0.00	0.00	6,386.70	-237.00	101.00	257 62	0.00	0 00	0 00
6,500.00	0.00	0.00	6,486.70	-237.00	101.00	257.62	0.00	0 00	0.00
6,600.00	0.00	0.00	6,586.70	-237.00	101.00	257 62	0.00	0.00	0.00
6,700.00	0.00	0.00	6,686.70	-237 00	101.00	257.62	0 00	0.00	0.00
6,800.00	0.00	0.00	6,786.70	-237.00	101.00	257.62	0.00	0.00	0.00
6,900.00	0 00	0.00	6,886.70	-237.00	101 00	257.62	0.00	0 00	0.00
7,000.00	0 00	0 00	6,986 70	-237.00	101.00	257 62	0.00	0.00	0.00
7,100.00	0.00	0.00	7,086.70	-237.00	101.00	257.62	0.00	0.00	0.00
7,200.00	0 00	0 00	7,186.70	-237.00	101.00	257.62	0.00	0 00	0.00
7,300 00	0.00	0.00	7,286.70	-237 00	101.00	257.62	0 00	0.00	0.00
7,313.30	0.00	0 00	7,300.00	-237.00	101.00	257 62	0.00	0.00	0.00
East HL-State H #1 - PBHL-State H #1 - South HL-State H #1									

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL-State H #1 - plan hits target - Circle (radius 10.00)	0 00	0.00	7,300.00	-237.00	101.00	646,392.20	528,285 50	32° 46' 37.164 N	104° 14' 28.693 W
South HL-State H #1 - plan misses by 14.14ft at 7313.30ft MD (7300.00 TVD, -237 00 N, 101.00 E) - Rectangle (sides W0.00 H200.00 D0.00)	0.00	0 00	7,300.00	-247.00	111 00	646,382.20	528,295 50	32° 46' 37.065 N	104° 14' 28.576 W
East HL-State H #1 - plan misses by 14.14ft at 7313.30ft MD (7300.00 TVD, -237.00 N, 101 00 E) - Rectangle (sides W800.00 H0.00 D0 00)	0.00	0 00	7,300.00	-247.00	111 00	646,382 20	528,295.50	32° 46' 37.065 N	104° 14' 28.576 W

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well State H #2
Company:	Mack Energy Corp	**TVD Reference:**	WELL @ 3606.00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	**MD Reference:**	WELL @ 3606.00ft (KB Elev)
Site:	State H #2	**North Reference:**	Grid
Well:	State H #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

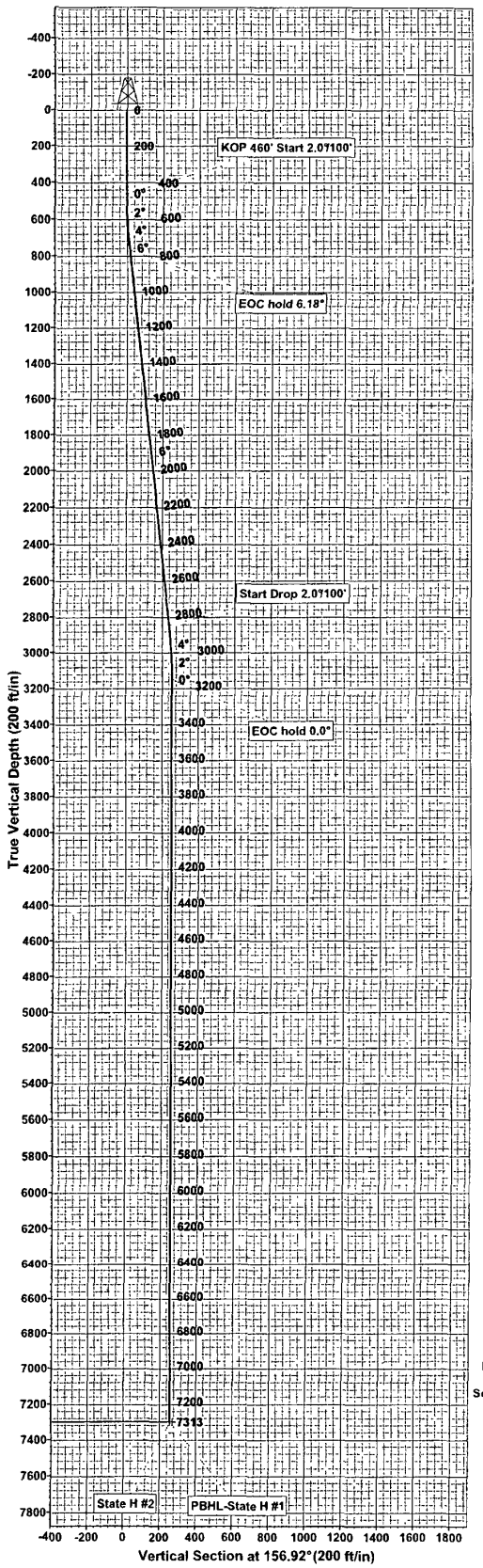
Plan Annotations

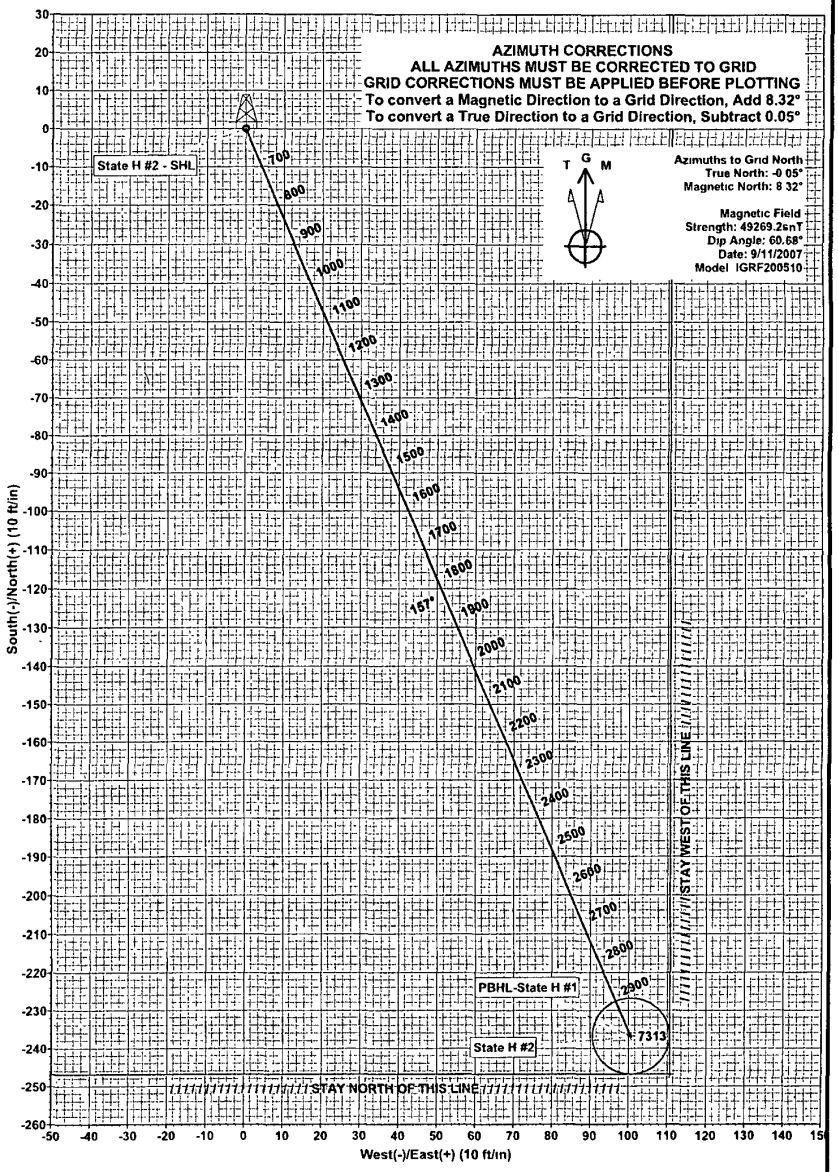
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
460.00	460.00	0.00	0.00	KOP 460' Start 2.0°/100'
768.78	768.18	-15.29	6.52	EOC hold 6.18°
2,854.52	2,841.82	-221.71	94.48	Start Drop 2.0°/100'
3,163.30	3,150 00	-237.00	101.00	EOC hold 0.0°

MACK Energy Corporation

Scientific Drilling for Mack Energy Corp.
Site: Eddy County, NM (NAD 27 NME)
Well: State H #2
Wellbore: Wellbore #1
Design: Plan #1

Scientific Drilling
Directional Drilling Operations





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	460.00	0.00	0.00	460.00	0.00	0.00	0.00	0.00	0.00	
3	768.78	6.18	156.92	768.18	-15.29	6.52	2.00	156.92	16.62	
4	2854.52	6.18	156.92	2841.82	-221.71	94.48	0.00	0.00	241.00	
5	3163.30	0.00	0.00	3150.00	-237.00	101.00	2.00	180.00	257.62	
6	7313.30	0.00	0.00	7300.00	-237.00	101.00	0.00	0.00	257.62	PBHL-State H #1

WELL DETAILS: State H #2

Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	646629.20	528184.50	32°46' 39.510 N	104°14' 29.874 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
East HL-State H #1	7300.00	-247.00	111.00	646382.20	528295.50	32°46' 37.065 N	104°14' 28.576 W	Rectangle (Sides: L800.00 W0.00)
PBHL-State H #1	7300.00	-237.00	101.00	646392.20	528285.50	32°46' 37.164 N	104°14' 28.693 W	Circle (Radius: 10.00)
South HL-State H #1	7300.00	-247.00	111.00	646382.20	528295.50	32°46' 37.065 N	104°14' 28.576 W	Rectangle (Sides: L0.00 W200.00)

PROJECT DETAILS: Eddy County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

Plan: Plan #1 (State H #2/Wellbore #1)

Created By: Julio Pina Date: 11-Sep-07
Checked: _____ Date: _____
Reviewed: _____ Date: _____
Approved: _____ Date: _____

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

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-103
May 27, 2004

WELL API NO. 30-015-35814	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No. B-9391	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)	7. Lease Name or Unit Agreement Name State H
1. Type of Well: Oil Well ☐ Gas Well ☒ Other	8. Well Number 2
2. Name of Operator Mack Energy Corporation	9. OGRID Number 013837
3 Address of Operator P. O. Box 960 Artesia, NM 88211-0960	10. Pool name or Wildcat Chalk Bluff Wolfcamp

4 Well Location
Unit Letter H 2063 feet from the North line and 441 feet from the East line
Section 2 Township 18S Range 27E NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3590' GR

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type_____ Depth Groundwater_____ Distance from nearest fresh water well_____ Distance from nearest surface water_____

Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
OTHER: Change casing ☒		OTHER: _____ ☐	

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

Mack Energy would like to change the casing string approved on this APD.

Drill a 17 1/2" hole to 200', run 13 3/8" 48# H-40 casing and cement.
Drill a 12 1/4" hole to 1150', run 8 5/8" 24# J-55 casing and cement.
Drill a 7 7/8" hole to approximately 7300', run 5 1/2" 17# L-80 casing and cement.

OCT 22 2007
OCD-ARTESIA

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

SIGNATURE Jerry W. Sherrell TITLE Production Clerk DATE 10/19/07

Type or print name Jerry W. Sherrell E-mail address: jerrys@mackenergycorp.com Telephone No (505)748-1288

For State Use Only

APPROVED BY: BRYAN G. ARRANT DISTRICT II GEOLOGIST TITLE _____ DATE OCT 22 2007

Conditions of Approval (if any):

MACK Energy Corporation

Mack Energy Corp.

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

OCT 22 2007
OCD-ARTESIA

Plan: Plan #2

Standard Planning Report

19 October, 2007

Scientific Drilling
Directional Drilling Operations

Database:	EDM 2003 16 Single User Db	**Local Co-ordinate Reference:**	Well State H #2
Company:	Mack Energy Corp	**TVD Reference:**	WELL @ 3606 00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	**MD Reference:**	WELL @ 3606 00ft (KB Elev)
Site:	State H #2	**North Reference:**	Grid
Well:	State H #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Project Eddy County, NM (NAD 27 NME)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site State H #2

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

Well State H #2

Well Position	**+N/-S**	0 00 ft	**Northing:**	646,629 20 ft	**Latitude:**	32° 46' 39 510 N
	+E/-W	0 00 ft	**Easting:**	528,184 50 ft	**Longitude:**	104° 14' 29 874 W
Position Uncertainty		0 00 ft	**Wellhead Elevation:**	3,606 00 ft	**Ground Level:**	0 00 ft

Wellbore Wellbore #1

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

Design Plan #2

Audit Notes:

Version:	**Phase:**	PLAN	**Tie On Depth:**	0 00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0 00	0 00	156 92

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	
1,250 00	0 00	0.00	1,250 00	0.00	0 00	0 00	0 00	0.00	0.00	
1,785 00	10 70	156.92	1,781.89	-45.82	19 53	2 00	2 00	0 00	156 92	
2,636 01	10 70	156.92	2,618 11	-191 18	81 47	0 00	0 00	0.00	0 00	
3,171 01	0 00	0 00	3,150 00	-237 00	101 00	2 00	-2 00	0.00	180 00	
7,321 01	0 00	0 00	7,300 00	-237.00	101 00	0 00	0 00	0 00	0 00	PBHL-State H #1

Database:	EDM 2003 16 Single User Db	**Local Co-ordinate Reference:**	Well State H #2
Company:	Mack Energy Corp	**TVD Reference:**	WELL @ 3606.00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	**MD Reference:**	WELL @ 3606 00ft (KB Elev)
Site:	State H #2	**North Reference:**	Grid
Well:	State H #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00
1,150 00	0 00	0 00	1,150 00	0 00	0 00	0.00	0 00	0 00	0.00
8 5/8" Casing									
1,250 00	0 00	0.00	1,250 00	0 00	0.00	0 00	0 00	0 00	0 00
KOP 1250' Start 2.0°/100'									
1,300 00	1 00	156 92	1,299 99	-0 40	0 17	0 44	2.00	2 00	0 00
1,400 00	3 00	156 92	1,399 93	-3 61	1 54	3.93	2 00	2 00	0 00
1,500 00	5.00	156.92	1,499 68	-10 03	4.27	10 90	2 00	2 00	0 00
1,600 00	7 00	156 92	1,599 13	-19 64	8 37	21 35	2.00	2 00	0 00
1,700 00	9 00	156.92	1,698 15	-32 45	13.83	35 27	2 00	2.00	0 00
1,785 00	10 70	156 92	1,781 90	-45 82	19 53	49 81	2 00	2 00	0 00
EOC hold 10.70°									
1,800 00	10 70	156 92	1,796.63	-48 38	20 62	52 59	0 00	0 00	0.00
1,900 00	10 70	156 92	1,894 89	-65 46	27 90	71 16	0 00	0 00	0 00
2,000 00	10 70	156 92	1,993 15	-82 54	35 18	89 73	0 00	0 00	0 00
2,100 00	10 70	156 92	2,091 41	-99 63	42 46	108.29	0 00	0 00	0 00
2,200 00	10.70	156.92	2,189 68	-116 71	49.74	126 86	0 00	0 00	0 00
2,300.00	10.70	156.92	2,287 94	-133 79	57.01	145 43	0 00	0.00	0 00
2,400 00	10 70	156.92	2,386 20	-150 87	64.29	163 99	0 00	0 00	0 00
2,500 00	10.70	156 92	2,484 46	-167 95	71.57	182 56	0.00	0 00	0 00
2,599 99	10 70	156 92	2,582 72	-185 03	78 85	201 13	0 00	0 00	0 00
2,636 01	10 70	156 92	2,618 11	-191 18	81 47	207 81	0 00	0 00	0.00
Start Drop 2.0°/100'									
2,699 99	9.42	156.92	2,681 11	-201 46	85 85	218 99	2 00	-2 00	0 00
2,799 99	7 42	156 92	2,780 03	-214 93	91 59	233 63	2 00	-2 00	0 00
2,899 99	5.42	156.92	2,879 39	-225 22	95.98	244 81	2 00	-2 00	0 00
2,999 99	3 42	156 92	2,979 09	-232 31	99 00	252 52	2 00	-2 00	0 00
3,099 99	1 42	156 92	3,079 00	-236 19	100 65	256 74	2 00	-2 00	0.00
3,171.01	0.00	0.00	3,150 00	-237 00	101 00	257.62	2 00	-2 00	0 00
EOC hold 0.0°									
7,321 01	0 00	0 00	7,300.00	-237 00	101 00	257 62	0 00	0 00	0.00
East HL-State H #1 - PBHL-State H #1 - South HL-State H #1									

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL-State H #1 - plan hits target - Circle (radius 10 00)	0 00	0 00	7,300 00	-237 00	101.00	646,392 20	528,285 50	32° 46' 37 164 N	104° 14' 28.693 W
South HL-State H #1 - plan misses by 14 14ft at 7321.01ft MD (7300.00 TVD, -237 00 N, 101.00 E) - Rectangle (sides W0 00 H200.00 D0.00)	0 00	0 00	7,300 00	-247 00	111 00	646,382 20	528,295 50	32° 46' 37 065 N	104° 14' 28 576 W
East HL-State H #1 - plan misses by 14 14ft at 7321 01ft MD (7300 00 TVD, -237.00 N, 101.00 E) - Rectangle (sides W800 00 H0 00 D0 00)	0 00	0 00	7,300 00	-247 00	111 00	646,382.20	528,295 50	32° 46' 37 065 N	104° 14' 28.576 W

Database:	EDM 2003.16 Single User Db	**Local Co-ordinate Reference:**	Well State H #2
Company:	Mack Energy Corp	**TVD Reference:**	WELL @ 3606 00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	**MD Reference:**	WELL @ 3606 00ft (KB Elev)
Site:	State H #2	**North Reference:**	Grid
Well:	State H #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (ft)	Hole Diameter (ft)
1,150 00	1,150 00	8 5/8" Casing	8 62500	12.25000

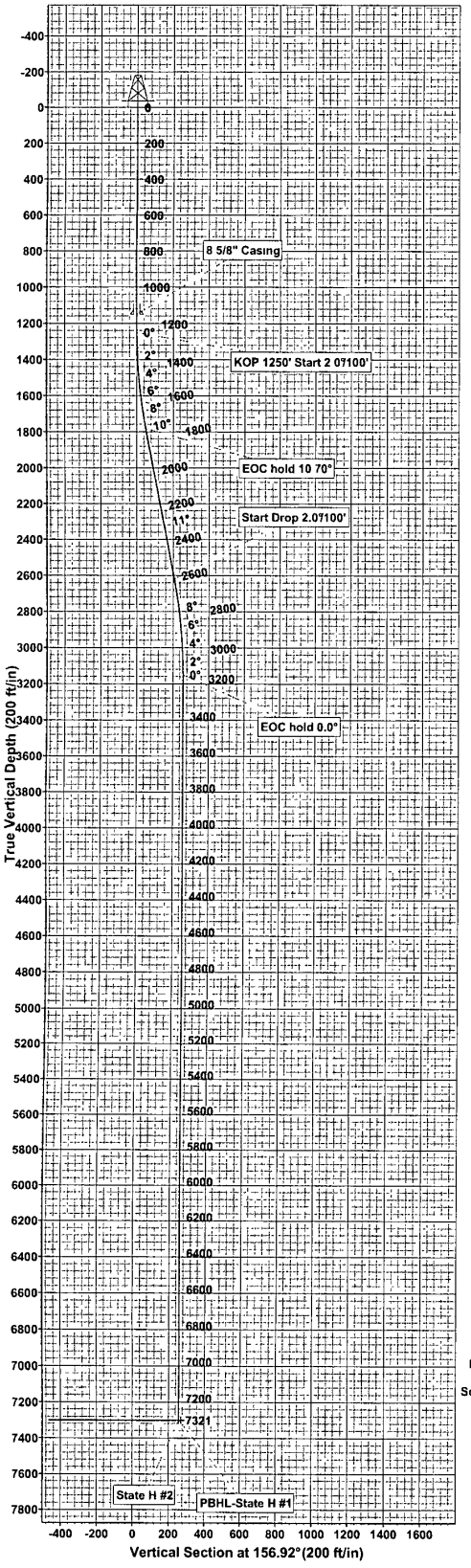
Plan Annotations

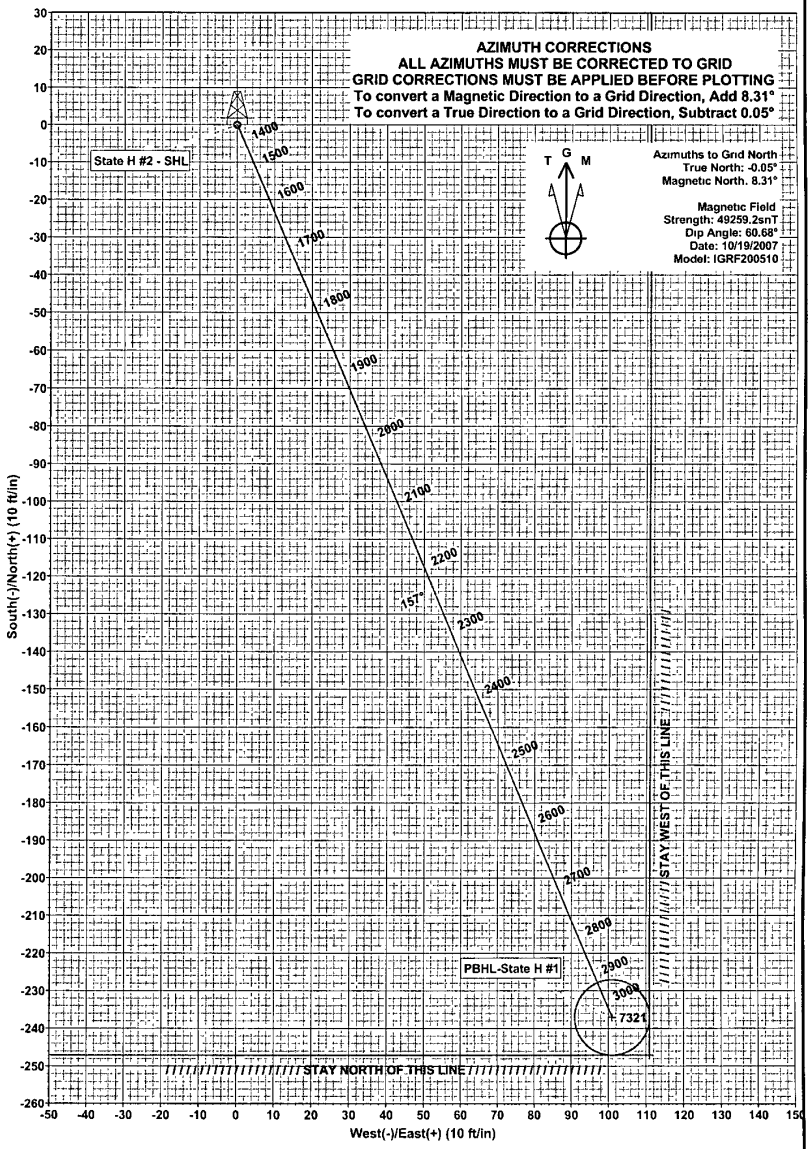
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
1,250 00	1,250 00	0 00	0 00	KOP 1250' Start 2 0°/100'
1,785 00	1,781 90	-45 82	19.53	EOC hold 10.70°
2,636 01	2,618 11	-191 18	81 47	Start Drop 2 0°/100'
3,171 01	3,150 00	-237 00	101 00	EOC hold 0 0°

MACK Energy Corporation

Scientific Drilling for Mack Energy Corp.
Site: Eddy County, NM (NAD 27 NME)
Well: State H #2
Wellbore: Wellbore #1
Design: Plan #2

Scientific Drilling
Directional Drilling Operations





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1250.00	0.00	0.00	1250.00	0.00	0.00	0.00	0.00	0.00	
3	1785.00	10.70	156.92	1781.89	-45.82	19.53	2.00	156.92	49.81	
4	2636.01	10.70	156.92	2618.11	-191.18	81.47	0.00	0.00	207.81	
5	3171.01	0.00	0.00	3150.00	-237.00	101.00	2.00	180.00	257.62	
6	7321.01	0.00	0.00	7300.00	-237.00	101.00	0.00	0.00	257.62	PBHL-State H #1

WELL DETAILS: State H #2

Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	646629.20	528184.50	32°46' 39.510 N	104°14' 29.874 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
East HL-State H #1	7300.00	-247.00	111.00	646382.20	528295.50	32°46' 37.065 N	104°14' 28.576 W	Rectangle (Sides: L800.00 W0.00)
PBHL-State H #1	7300.00	-237.00	101.00	646392.20	528285.50	32°46' 37.164 N	104°14' 28.693 W	Circle (Radius: 10.00)
South HL-State H #1	7300.00	-247.00	111.00	646382.20	528295.50	32°46' 37.065 N	104°14' 28.576 W	Rectangle (Sides: L0.00 W200.00)

PROJECT DETAILS: Eddy County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

Plan: Plan #2 (State H #2/Wellbore #1)

Created By: Julio Pina — Date: 19-Oct-07
Checked: _____ Date: _____
Reviewed: _____ Date: _____
Approved: _____ Date: _____

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(505) 393-6161 Fax:(505) 393-0720
District II
1301 W. Grand Ave., Artesia, NM 88210
Phone:(505) 748-1283 Fax:(505) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico

Energy, Minerals and Natural Resources

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

Form C-103
Permit 65781

WELL API NUMBER
30-015-35814

5. Indicate Type of Lease
S

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFRENT RESERVIOR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:O

7. Lease Name or Unit Agreement Name
STATE H

8. Well Number
002

2. Name of Operator
MACK ENERGY CORP

9. OGRID Number
13837

3. Address of Operator
PO BOX 960 , , 11352 LOVINGTON HWY ARTESIA , NM 88211

10. Pool name or Wildcat

4. Well Location
Unit Letter H : 2063 feet from the N line and 441 feet from the E line
Section 2 Township 18S Range 27E NMPM Eddy County

11. Elevation (Show whether DR, KB, BT, GR, etc.)
3590 GR

Pit or Below-grade Tank Application ☐ or Closure ☐
Pit Type _____ Depth to Groundwater_____ Distance from nearest fresh water well_____ Distance from nearest surface water_____
Pit Liner Thickness:_____ mil Below-Grade Tank: Volume_____ bbls; Construction Material_____

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTER CASING ☐
TEMPORARILY ABANDON ☐	CHANGE OF PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDON ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
Other:		Other: **Drilling/Cement**	☒

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

10/31/2007 Spud 17 1/2 hole @ 10:00pm.
11/1/2007 TD @ 201. Ran 5jts 13 3/8 H-40 48# @ 201', Cmt w/250sx C+2%CC, circ 104sx, plug down 12:20pm. WOC 18hrs test to 1800# 30min, OK.
11/4/2007 TD 12 1/4 hole @ 1165'.
11/5/2007 Ran 27jts 8 5/8 J-55 32# @ 1170'. Cmt w/475sx C, 200sx C+2%CC, circ 218sx, plug down 3:00am. WOC 12hrs test to 600# 30min, OK.
11/20/2007 TD @ 7545'.
11/22/2007 Ran 177jts 5 1/2 J-55 17# @ 7495', Cmt w/530sx C, circ 217sx. 2nd stage 365sx C, 520sx C, plug down 6:55pm, circ 200sx. WOC 12hrs test to 600# 20min, OK.
10/31/2007 Spudded well.

Casing and Cement Program

Date	String	Fluid Type	Hole Size	Csg Size	Weight lb/ft	Grade	Est TOC	Dpth Set	Sacks	Yield	Class	1" Dpth	Pres Held	Pres Drop	Open Hole
11/01/07	Surf	FreshWater	17.5	13.375	48	H-40	0	201	250		C		1800	0	Y
11/05/07	Int1	FreshWater	12.25	8.625	32	J-55	0	1170	675		C		600	0	Y
11/22/07	Prod	CutBrine	7.875	5.5	17	J-55	0	7495	1415		C		600	0	Y

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

SIGNATURE Electronically Signed TITLE Production Clerk DATE 12/11/2007
Type or print name Jerry Sherrell E-mail address jerrys@mackenergycorp.com Telephone No. 505-748-1288

For State Use Only:
APPROVED BY: Bryan Arrant TITLE Geologist DATE 12/12/2007 7:46:02 AM

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

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-103
May 27, 2004

WELL API NO. 30-015-35814	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No. B-9391	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)	7. Lease Name or Unit Agreement Name State H
1. Type of Well: Oil Well ☒ Gas Well ☐ Other FEB 26 2008	8. Well Number 2
2. Name of Operator Mack Energy Corporation OCD-ARTESIA	9. OGRID Number 013837
3. Address of Operator P. O. Box 960 Artesia, NM 88211-0960	10. Pool name or Wildcat Red Lake; Glorieta-Yeso, NE

4. Well Location
Unit Letter H 2063 feet from the North line and 441 feet from the East line
Section 2 Township 18S Range 27E NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3590' GR

Pit or Below-grade Tank Application ☐ **or Closure** ☐

Pit type_____ **Depth Groundwater**_____ **Distance from nearest fresh water well**_____ **Distance from nearest surface water**_____

Pit Liner Thickness: _____ mil **Below-Grade Tank: Volume** _____ **bbls; Construction Material**

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
OTHER: _____ ☐		OTHER: Completion ☒	

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

12/15/2007 Perforated from 6134.5-6434' 57 holes.
12/17/2007 Acidized w/4500 gals 15%.
12/18/2007 RIH w/203 joints 2 7/8 tubing SN @ 6439'. RIH w/2 1/2"x2"x20' pump.
12/26/2007 Set CIBP @ 6020' w/35' cement cap. Perforated from 5789.5-5957.5' 52 holes.
12/27/2007 Acidized w/4500 gals 15%.
12/28/2007 Perforated from 5391-5700.5' 83 holes. Acidized w/5000 gals 15%.
12/29/2007 RIH w/188 joints 2 7/8 tubing SN @ 5965'. RIH w/2 1/2"x2"x20' pump.
1/7/2008 Set CIBP @ 5300' w/35' cement cap. Perforated from 4118.5-4197' 40 holes.
1/8/2008 Acidized w/2000 gals 15%.
1/9/2008 Frac w/8130# liteprop, 68,890# 16/30 sand, 14,046# siberprop, 91,292 gals 30/40# gel.
1/11/2008 RIH w/134 joints 2 7/8" tubing SN @ 4243'. RIH 2 1/2 x 2 x 20' Pump.

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

SIGNATURE Jerry W. Sherrell TITLE Production Clerk DATE 2/25/08

Type or print name Jerry W. Sherrell E-mail address: jerrys@mackenergycorp.com Telephone No. (575)748-1288

For State Use Only

FOR RECORDS ONLY

APPROVED BY: _____ TITLE _____ DATE 2-28-08

Conditions of Approval (if any):

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

State of New Mexico
Energy, Minerals & Natural Resources

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

FEB 26 2008
OCD-ARTESIA

Form C-104
Revised Feb. 26, 2007

Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

1 Operator name and Address	2 OGRID Number
Mack Energy Corporation P.O. Box 960 Artesia, NM 88211-0960	013837
	3 Reason for Filing Code/ Effective Date NW

4 API Number	5 Pool Name	6 Pool Code
30-015-35814	Red Lake; Glorieta-Yeso, NE	~~51120~~ 96836

7 Property Code	8 Property Name	9 Well Number
303847	State H	2

H. Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	2	18S	27E		2063	North	441	East	Eddy

Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	2	18S	27E		2300	North	340	East	Eddy

12 Lse Code	13 Producing Method Code	14 Gas Connection Date	C-129 Permit Number	16 C-129 Effective Date	17 C-129 Expiration Date
S	P	1/11/08			

III. Oil and Gas Transporters

18 Transporter OGRID	19 Transporter Name and Address	20 O/G/W
015694	Navajo Refining PO Box 159 Artesia, NM 88211-0159	O
036785	DCP Midstream LP 4001 Penbrook Odessa, TX 79762	G

IV. Well Completion Data

21 Spud Date	22 Ready Date	23 TD	24 PBTD	25 Perforations	26 DHC, MC
10/31/2007	11/23/2007	7545'	5265'	4118.5-4197'	

27 Hole Size	28 Casing & Tubing Size	29 Depth Set	30 Sacks Cement
17 1/2	13 3/8	201	250
12 1/4	8 5/8	1170	675
7 7/8	5 1/2	7495	1415
	2 7/8	4243	

V. Well Test Data

31 Date New Oil	32 Gas Delivery Date	33 Test Date	34 Test Length	35 Tbg. Pressure	36 Csg. Pressure
1/14/2008	1/14/2008	1/30/08	24 hours		
37 Choke Size	**38 Oil**	**39 Water**	**40 Gas**		**41 Test Method**
	8	30	30		P

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

Signature: Jerry W. Sherrell

Printed name: Jerry W. Sherrell

Title: Production Clerk

E-mail Address: jerrys@mackenergycorp.com

OIL CONSERVATION DIVISION

Approved by: Kimberly M. Wilson

Title: Compliance Officer

Approval Date: 3-5-08

Date: 2/25/08	Phone: (575)748-1288	

Submit to Appropriate District Office
State Lease - 6 copies
Fee Lease - 5 copies
DISTRICT I
P O Box 1980, Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd , Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87505

Form C-105
Revised 1-1-89

WELL API NO: 30-015-35814

5 Indicate Type of Lease: STATE ☒ FEE ☐

6 State Oil & Gas Lease No: B-9391

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1 Type of Well: OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER

b Type of Completion: NEW WELL ☒ WORK OVER ☐ Deepen ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER

7 Lease Name or Unit Agreement Name: State H

2 Name of Operator: Mack Energy Corporation

FEB 26 2008
OCD-ARTESIA

8 Well No: 2

3 Address of Operator: P.O. Box 960, Artesia, NM 88211-0960

9 Pool name or Wildcat: Red Lake; Glorieta-Yeso, NE

4. Well Location

Unit Letter H : 2063 Feet From The North Line and 441 Feet From The East Line

Section 2 Township 18S Range 27E NMPM Eddy County

10 Date Spudded	11 Date TD Reached	12 Date Compl (Ready to Prod.)	13 Elevations (DF & RKB, RT, GR, etc.)	14 Elev Casinghead
10/31/2007	11/21/2007	1/11/08	3590' GR	

15 Total Depth	16. Plug Back TD	17 If Multiple Compl How Many Zones?	18 Intervals Drilled By	Rotary Tools	Cable Tools
7545'	5265'			Yes	

19 Producing Interval(s), of this completion - Top, Bottom, Name: 4118.5-4197'

20 Was Directional Survey Made: Yes

21 Type Electric and Other Logs Run: Gamma Ray, Neutron, Density, Lateralog, Spectral Gamma Ray

22 Was Well Cored: No

23 **CASING RECORD (Report all strings set in well)**

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8	48	201	17 1/2	250 sx	None
8 5/8	32	1170	12 1/4	675 sx	None
5 1/2	17	7495	7 7/8	1415 sx	None

24 LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25 TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2 7/8	4243'	

26 Perforation record (interval, size, and number)

6134.5-6434', .42, 57 CIBP @ 6020 w/35' cmt cap
5391-5957.5', .42, 92 CIBP @ 5300' w/35' cmt cap
4118.5-4197', .42, 40

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

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
	See C-103 for detail

28 **PRODUCTION**

Date First Production	Production Method (Flowing, gas lift, pumping - Size and type pump)	Well Status (Prod. or Shut-in)
1/14/2008	2 1/2x2x20' Pump	Producing

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water- Bbl	Gas - Oil Ratio
1/30/08	24 hours			8	30	30	3750

Flow Tubing Press	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl	Gas - MCF	Water- Bbl.	Oil Gravity - API - (Corr.)
			8	30	30	

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

Test Witnessed By: Robert C. Chase

30 List Attachments: Deviation Survey and Logs

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

Signature: Jerry W. Sherrell Printed Name: Jerry W. Sherrell Title: Production Clerk Date: 2/25/08

Silver Oak Drilling

PO Box 1370
Artesia, NM 88211-1370
(505) 748-1288

FEB 26 2008
OCD-ARTESIA

November 30, 2007

Mack Energy Corporation
PO Box 960
Artesia, NM 88211-0960

RE: State H #2
2310' FNL & 990' FEL
Sec. 2, T18S, R27E
Eddy County, New Mexico

Dear Sir,

The attached is the Deviation Survey for the above captioned re-entered well.

Very truly yours,

Leroy Curry
Drilling Superintendent

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 30th day of November, 2007.

Reginia L. Garner
Notary Public

OFFICIAL SEAL
REGINIA L. GARNER
NOTARY PUBLIC - STATE OF NEW MEXICO
My commission expires Aug. 30, 2008

Date	Depth	Dev	Dir
11/01/2007	133.00	0.50	0.00
11/02/2007	431.00	0.75	0.00
11/03/2007	700.00	0.50	0.00
11/04/2007	975.00	1.00	0.00
11/04/2007	1134.00	0.50	0.00
11/06/2007	1301.00	1.66	164.90
11/06/2007	1396.00	3.41	161.90
11/07/2007	1492.00	5.19	159.10
11/07/2007	1587.00	7.21	156.40
11/07/2007	1683.00	8.51	155.20
11/07/2007	1778.00	9.94	158.10
11/07/2007	1873.00	9.56	157.60
11/08/2007	1968.00	10.53	159.60
11/08/2007	2064.00	9.83	160.00
11/08/2007	2159.00	9.69	160.50
11/08/2007	2350.00	10.78	156.20
11/08/2007	2445.00	10.67	156.40
11/08/2007	2540.00	10.54	155.40
11/08/2007	2604.00	10.43	156.30
11/09/2007	2699.00	8.58	156.50
11/09/2007	2794.00	7.39	158.60
11/09/2007	2984.00	4.30	162.00
11/09/2007	3080.00	2.86	157.10
11/09/2007	3175.00	1.50	150.00
11/09/2007	3270.00	0.67	256.70
11/09/2007	3365.00	0.82	280.50
11/10/2007	3460.00	0.48	176.00
11/10/2007	3556.00	0.51	181.00
11/10/2007	3651.00	0.65	173.10
11/10/2007	3746.00	0.67	157.20
11/10/2007	3841.00	0.59	154.20
11/10/2007	3936.00	0.24	309.30
11/11/2007	4031.00	0.30	302.30
11/11/2007	4126.00	0.45	322.60
11/11/2007	4222.00	1.06	337.40
11/11/2007	4602.00	1.01	348.10
11/12/2007	4666.00	1.10	18.68
11/12/2007	4729.00	0.53	71.05
11/12/2007	4824.00	0.27	38.14
11/12/2007	4920.00	0.71	12.94
11/12/2007	5015.00	1.19	5.48
11/12/2007	5110.00	0.82	20.33
11/12/2007	5206.00	0.28	132.80
11/13/2007	5301.00	0.54	23.07
11/13/2007	5396.00	0.34	49.15
11/13/2007	5491.00	1.12	153.70
11/13/2007	5586.00	2.14	189.30
11/13/2007	5660.00	1.31	189.40
11/13/2007	5681.00	1.09	194.70
11/13/2007	5745.00	0.67	318.40
11/13/2007	5839.00	0.24	221.30
11/14/2007	5935.00	1.41	161.10
11/15/2007	5998.00	1.01	182.35
11/16/2007	6188.00	0.34	306.90
11/16/2007	6474.00	0.11	334.80
11/16/2007	6570.00	0.15	314.50
11/17/2007	6664.00	0.27	304.50
11/17/2007	6759.00	0.45	295.50
11/17/2007	6854.00	0.46	296.60
11/17/2007	6949.00	0.59	290.10
11/17/2007	7044.00	1.09	134.40
11/18/2007	7140.00	0.38	89.52
11/18/2007	7235.00	0.57	122.40
11/18/2007	7382.00	0.81	125.40

Scientific Drilling

FEB 26 2008
OCD-ARTESIA

MACK ENERGY

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

This survey is correct to the best of my knowledge
and is supported by actual field data.

.....Company Representative

Notorized this date 19th of December, 2007.

Notary Signature
County of Midland
State of Texas

NOTARY PUBLIC STATE OF TEXAS
DEBORAH SUE BYNUM
Notary Public, State of Texas
My Commission Expires
5/9/08

Scientific Drilling

Scientific Drilling International
Survey Report

Company:	MACK ENERGY	**Date:** 12/16/2007	**Time:** 18:34.47	**Page:**	1
Field:	Chalk Bluff	**Co-ordinate(NE) Reference:**	Site: Eddy County, NM, Grid North		
Site:	Eddy County, NM	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	State H #2	**Section (VS) Reference:**	Well (0.00N,0.00E,156.92Azi)		
Wellpath:	VH - Job #32K11071013	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey:	11/06/07 KSRG 0'-1143'	**Start Date:**	11/06/2007
Company:	Scientific Drilling Internatio	**Engineer:**	Madrid w/P&M
Tool:	Keeper;Keeper Gyro	**Tied-to:**	From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0 00	0.00	359.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.62	77.45	100.00	0.10	0.12	0.53	0.62	0.54	77.45
200.00	0.42	110.33	199.99	0 45	0.11	1.40	0.35	1.40	85.60
300.00	0.37	96.72	299.99	0.86	-0.06	2.06	0.11	2.07	91.59
400.00	0.38	143.78	399.99	1.35	-0.36	2.58	0.30	2.61	98.00
500.00	0.26	212.14	499.99	1.80	-0.82	2.66	0.37	2.78	107.20
600.00	0.28	250.72	599.99	1.91	-1.10	2.30	0.18	2.55	115 41
700.00	0.44	271.18	699.99	1.74	-1.17	1.69	0.20	2.05	124.64
800.00	0.40	74.03	799.98	1.62	-1.06	1.64	0.83	1.96	122.94
900.00	1.01	96.02	899.98	2.09	-1.06	2.85	0.66	3.04	110.38
1000.00	0.95	87.15	999.96	2.81	-1.11	4.56	0.16	4.69	103.70
1100.00	0.56	76.15	1099.95	3.17	-0.95	5.86	0.41	5.94	99.24
1143.00	0.26	86.43	1142.95	3.24	-0.90	6.16	0.72	6.23	98.28

Scientific Drilling

Scientific Drilling International
Survey Report

Company:	MACK ENERGY	**Date:** 12/16/2007	**Time:** 19:33:59	**Page:**	1
Field:	Chalk Bluff	**Co-ordinate(NE) Reference:**	Site: Eddy County, NM, Grid North		
Site:	Eddy County, NM	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	State H #2	**Section (VS) Reference:**	Well (0.00N,0.00E,156.92Azi)		
Wellpath:	DH - Job #32D11071006	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey:	11/05/07-11/14/07 MWD 1206'-7367'	**Start Date:**	11/05/2007
Company:	Scientific Drilling Internatio	**Engineer:**	Hernandez/Biggs/Elger
Tool:	MWD;MWD	**Tied-to:**	From: Definitive Path

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
1143.00	0.26	86.43	1142.95	3.24	-0.90	6.16	0.00	6.23	98.28
1206.00	0.17	46.81	1205.95	3.26	-0.82	6.37	0.27	6.43	97.37
1301.00	1.66	164.91	1300.94	4.57	-2.06	6.83	1.84	7.14	106.75
1396.00	3.41	161.92	1395.84	8.75	-6.07	8.07	1.85	10.10	126.96
1492.00	5.19	159.14	1491.57	15.93	-12.84	10 50	1.87	16.59	140.73
1587.00	7.21	156.46	1586.01	26.19	-22.32	14.41	2.15	26.57	147.15
1682.00	8.51	155.25	1680.11	39.18	-34.17	19.74	1.38	39.46	149.99
1778.00	9 94	158.14	1774.87	54.56	-48.32	25 80	1.57	54.77	151.90
1873.00	9 56	157.67	1868.50	70.65	-63.22	31.85	0.41	70.79	153.26
1968.00	10.53	159.64	1962.04	87.21	-78.66	37.86	1.08	87.30	154.30
2064.00	9 83	160.07	2056.53	104.15	-94.59	43.71	0.73	104.20	155.20
2159.00	9.69	160.58	2150.15	120.23	-109.75	49.13	0.17	120.25	155.88
2255.00	10 79	160.25	2244.62	137.26	-125.83	54.86	1.15	137.27	156.45
2350.00	10.78	156.23	2337.95	155.02	-142.33	61.44	0.79	155.02	156.65
2445.00	10.67	156.45	2431.29	172.70	-158.52	68.54	0.12	172.70	156.62
2540.00	10.54	155.44	2524.66	190.18	-174.49	75.66	0.24	190.18	156.56
2604.00	10.43	156.37	2587.60	201.82	-185.12	80.42	0.32	201.83	156.52
2699.00	8.58	156.51	2681.29	217.51	-199.50	86.69	1.95	217.52	156.51
2794.00	7.39	158.65	2775.36	230.71	-211.69	91.74	1.29	230.71	156.57
2889.00	5.58	158.12	2869.75	241 43	-221.66	95.68	1.91	241.43	156.65
2984.00	4.30	167.04	2964.40	249.55	-229.42	98.20	1.57	249.55	156.83
3080.00	2.86	157 16	3060.21	255.49	-235.14	99.94	1.63	255.49	156.97
3175.00	1.50	150.04	3155.14	259.10	-238.40	101.48	1.46	259.10	156.94
3270.00	0.67	256.00	3250 13	260.24	-239.61	101.56	1.90	260.24	157.03
3365.00	0.82	280 00	3345.12	259.79	-239.63	100.35	0.36	259.79	157.28
3460.00	0.48	176.03	3440.12	259.79	-239.90	99.71	1.10	259 80	157.43
3556.00	0.51	181.08	3536.11	260 56	-240.73	99.73	0.06	260.57	157.50
3651.00	0.65	173.19	3631.11	261.46	-241.69	99.79	0.17	261.48	157.57
3746.00	0.67	157.21	3726.10	262.54	-242.74	100.07	0.19	262.55	157.60
3841.00	0.59	154.21	3821.10	263.58	-243.69	100.50	0.09	263.60	157 59
3936.00	0.24	309.36	3916.09	263.89	-244.00	100.55	0.86	263 91	157.60
4031.00	0.30	302.31	4011 09	263.51	-243.74	100.19	0.07	263.53	157.66
4126.00	0.45	322.60	4106.09	262.95	-243.32	99.75	0.21	262.97	157.71
4222.00	1.06	337.45	4202.08	261.69	-242.20	99.18	0.66	261.72	157.73
4317.00	0.86	37.93	4297.07	260.47	-240.82	99.29	1.03	260.49	157.59
4412.00	0.59	7.90	4392.06	259.70	-239.78	99.79	0.48	259.71	157.40
4507.00	1.14	0.19	4487.05	258.42	-238.35	99.86	0.59	258.42	157.27
4602.00	1 01	346 16	4582.04	256.72	-236.59	99.66	0.31	256.72	157.16
4667.00	1.10	18.68	4647.03	255.69	-235.44	99.73	0.92	255.69	157.04
4729.00	0.53	71.05	4709.02	255.27	-234.78	100.19	1.42	255.27	156.89
4824.00	0.28	38.14	4804.02	255.19	-234 46	100.75	0.35	255.19	156.75
4920.00	0.71	12.94	4900.01	254.59	-233.69	101.03	0.49	254.60	156.62
5015.00	1.19	5.48	4995.00	253.25	-232.14	101.25	0.52	253.26	156.43
5110.00	0.82	20.33	5089.99	251.89	-230.52	101.58	0.47	251.91	156.22
5206.00	0.28	132.80	5185.98	251.60	-230.03	101.99	1.00	251.63	156.09
5301.00	0.54	23.07	5280.98	251.51	-229.78	102.34	0.72	251.54	155.99
5396.00	0.34	49.15	5375.98	251.11	-229.18	102.73	0.29	251.15	155.86
5491.00	1.12	153 76	5470.97	251.95	-229.83	103.35	1.32	252.00	155.79
5586.00	2.14	189.33	5565.94	254.38	-232.42	103.47	1.46	254.41	156.00

Scientific Drilling International
Survey Report

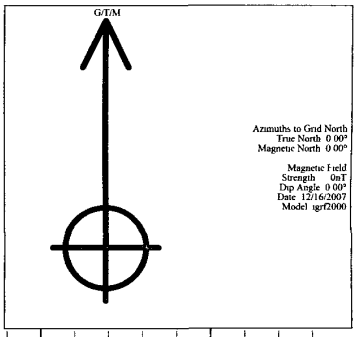
Company:	MACK ENERGY	**Date:** 12/16/2007	**Time:** 19:33:59	**Page:**	2
Field:	Chalk Bluff	**Co-ordinate(NE) Reference:**	Site: Eddy County, NM, Grid North		
Site:	Eddy County, NM	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	State H #2	**Section (VS) Reference:**	Well (0 00N,0.00E,156.92Azi)		
Wellpath:	DH - Job #32D11071006	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

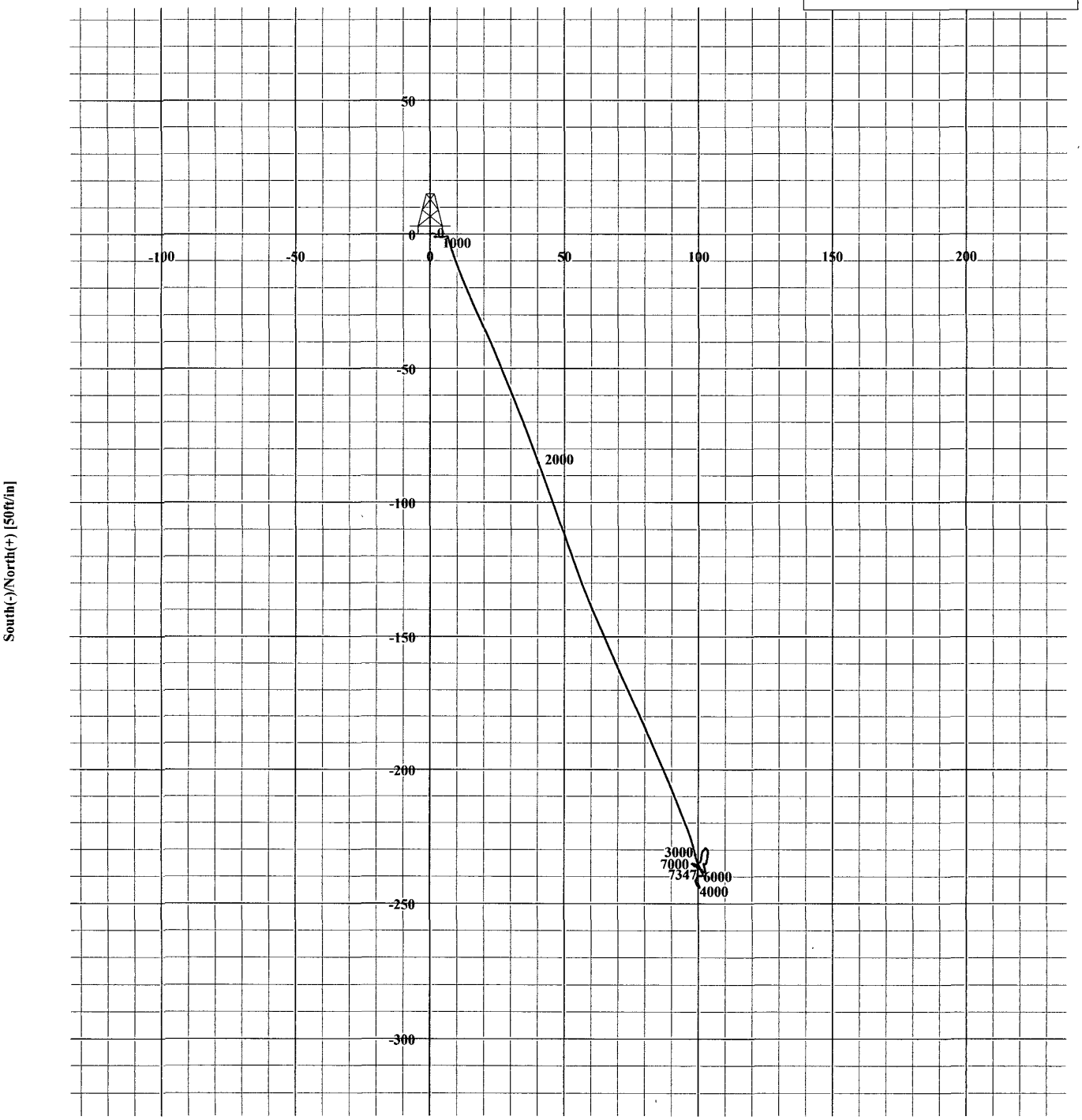
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
5681.00	1.09	194.79	5660.90	256.59	-235.04	102.96	1.12	256.60	156.34
5745.00	0.67	318.43	5724.89	256.71	-235.35	102.55	2.44	256.72	156.45
5839.00	0.24	221.30	5818.89	256.28	-235.08	102.06	0.79	256.28	156.53
5935.00	1.41	161.10	5914.88	257.54	-236.35	102.31	1.36	257.55	156.59
5998.00	1.01	182.35	5977.87	258 82	-237.64	102.54	0.94	258.82	156.66
6093.00	0.20	294.46	6072.86	259.45	-238.41	102.35	1.16	259.45	156.77
6189.00	0.34	306.99	6168.86	259.08	-238.17	101.97	0.16	259.08	156.82
6284.00	0.45	287.60	6263.86	258.59	-237 89	101.39	0.18	258.59	156.92
6379.00	1.01	331.75	6358.85	257.51	-237.04	100.64	0.79	257.51	157.00
6474.00	0.11	334 85	6453.84	256.59	-236.22	100.20	0.95	256.59	157.01
6570 00	0.15	314.50	6549.84	256.38	-236.04	100.07	0.06	256.38	157.02
6665.00	0.27	304.58	6644.84	256.08	-235.83	99.80	0.13	256.08	157.06
6760.00	0.45	295.56	6739.84	255.61	-235.54	99.28	0.20	255.61	157.14
6855.00	0.46	296.68	6834.84	255 04	-235.21	98.60	0.01	255.04	157.26
6950.00	0 51	281.73	6929.83	254.50	-234.95	97.85	0.14	254.51	157.39
7046.00	1.09	134.41	7025.83	255.10	-235.50	98.08	1.61	255.11	157.39
7140.00	0.38	89.52	7119.82	256.05	-236.13	99.03	0.92	256.05	157.25
7235.00	0.57	122.42	7214.82	256.56	-236.38	99.75	0.34	256.56	157.12
7330.00	0.81	125.40	7309.81	257.52	-237.02	100.69	0.26	257.52	156.98
7367.00	0.87	128 12	7346.81	257.99	-237.35	101.13	0.19	257.99	156.92

Scientific Drilling

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





Wilson, Kimberly M, EMNRD

From: Jerry Sherrell [jerrys@mackenergycorp.com]
Sent: Wednesday, March 05, 2008 3:37 PM
To: Wilson, Kimberly M, EMNRD
Subject: FW: Financial Assurance/Rule 40- Mack
Importance: High

From: Altomare, Mikal, EMNRD [mailto:Mikal.Altomare@state.nm.us]
Sent: Tuesday, March 04, 2008 11:03 AM
To: Mull, Donna, EMNRD
Cc: Rebecca Groh; Jerry Sherrell; Phillips, Dorothy, EMNRD
Subject: Financial Assurance/Rule 40- Mack
Importance: High

Donna –
I have received a pdf version of what appears to be a properly and fully executed single well bond for the state h no. 001, 03-015-00745, which Mack has assured me that they are over-nighting to our office. Everything appears to be in order, and I expect that, upon receipt of the original in our office, it will be reviewed and accepted and Mack will no longer be listed as being out of compliance with financial assurance requirements. That being said, and given that Mack has posted all other necessary financial assurances for all other properties, if there are no other violations or issues with approval of pending Mack applications, consider them to be in compliance for purposes of pending permit applications with your office.
Please contact me if you have any questions.
Thanks,
Mikal

Mikal M. Altomare
Assistant General Counsel
Oil Conservation Division
Energy, Minerals & Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505
Tel 505.476.3480 ~ Fax 505.476.3462
mikal.altomare@state.nm.us

Submit 3 Copies To Appropriate District Office
District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W Grand Ave, Artesia, NM 8821 0
District III
1 000 Rio Brazos Rd, Aztec, NM 8741 0
District IV
1220 S. St. Francis Dr, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

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

Record Clean up

Form C-103
June 19, 2008

WELL API NO. 30-015-35814	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No. B-9391	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR, USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)	7. Lease Name or Unit Agreement Name State H
1. Type of Well: Oil Well ☒ Gas Well ☐ Other	8. Well Number 2
2. Name of Operator Mack Energy Corporation	9. OGRID Number 013837
3 Address of Operator P.O. Box 960 Artesia, NM 88210	10. Pool Name or Wildcat Red Lake; Glorieta-Yeso NE
4. Well Location Unit Letter H 2063 feet from the North line and 441 feet from the East line Section 2 Township 18S Range 27E NMPM County Eddy	
11. Elevation (Show *whether DR, RKB, RT, GR etc*) 3590' GR	

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIALWORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: ☐		OTHER: Workover	☒

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

2/12/2008 Perforated 3790.5-4025.5', 54 holes.
2/13/2008 Acidized w/ 2,500 gals 15% NEFE Acid.
2/20/2008 Frac w/ 20,156# White Sand 16/30, 13,828# Siber Prop 16/30, 36,414 gals 40# gel.
2/21/2008 Perforated 3364-3677', 72 holes.
2/22/2008 Acidized w/ 2,500 gals 15% NEFE Acid.
2/25/2008 Frac w/ 8,000# LiteProp 125 14/30, 73,600# White Sand 16/30, 15,380# Siber Prop 16/30, 85,000 gals 40# Linear Gel.
2/27/2008 RIH w/ 134jts 2 7/8" J-55 6.5# tubing, SN @ 4243', 2 1/2 x 2 x 20' pump.

RECEIVED
SEP 20 2012
NMOCD ARTESIA

Spud Date: 10/31/2007 Rig Release Date: 11/22/2007

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

SIGNATURE Deana Weaver TITLE Production Clerk DATE 9.18.12

Type or print name Deana Weaver E-mail address: dweaver@mec.com PHONE: (575)748-1288

For State Use Only

APPROVED BY: RWade TITLE Dist II Supervisor DATE 9/26/12

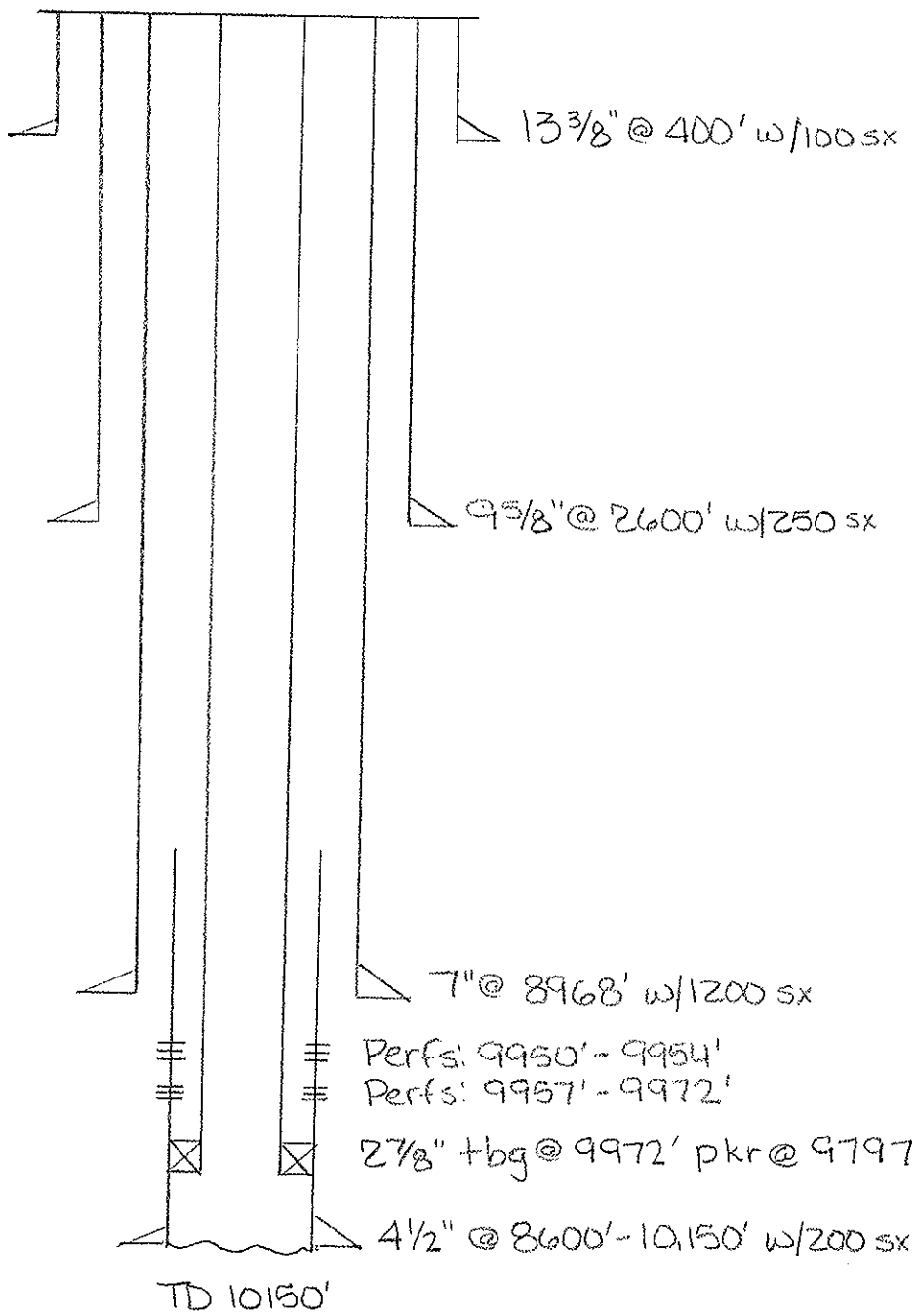
Conditions of Approval (if any):

SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 74
Artificial Penetration Review

OPERATOR	Mewbourne Oil Co.	**STATUS**	Active Gas
LEASE	Chalk Bluff Fed	**LOCATION**	Sec. 1 -T18S-R27E
WELL NUMBER	Com 003	**MUD FILLED BOREHOLE**	NA
DRILLED	11-24-92	**TOP OF INJECTION ZONE**	7345'
PLUGGED	NA	**API NO.**	30-015- 27163

REMARKS: Calc. Top of Cement behind 7" @ 910'



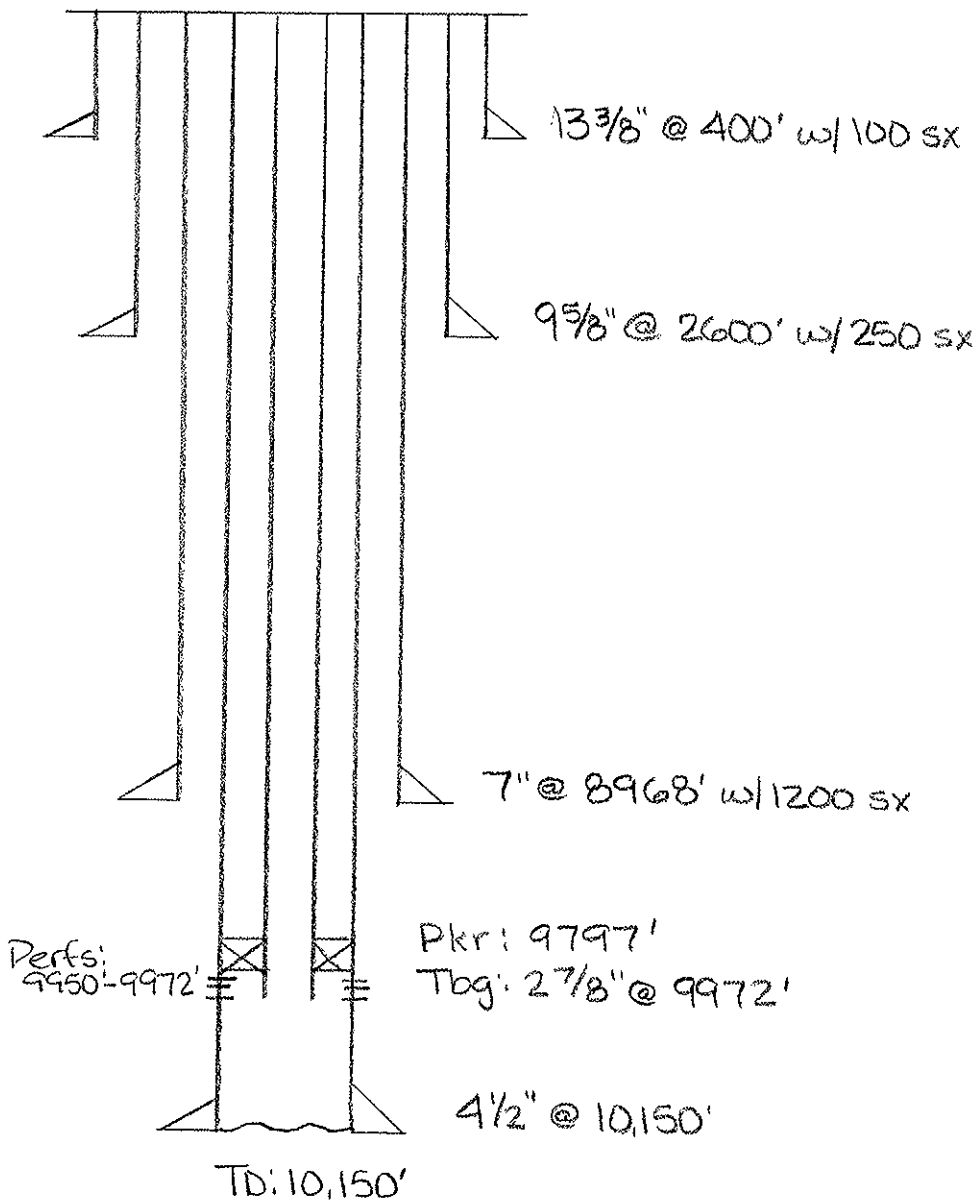
SUBSURFACE

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

OPERATOR Newbourne Oil
LEASE Chalk Bluff Federal
WELL NUMBER 3
DRILLED 1/16/93
PLUGGED NA

STATUS Active
LOCATION Sec. 1 -T 18S-R 27E
MUD FILLED BOREHOLE NA
TOP INJECTION ZONE -3702'
API NO. 30-015- 27163

REMARKS:



MAP ID NO. 99

MEWBOURNE OIL CO.
CHALK BLUFF FEDERAL COM NO. 003

API NO. 30-015-27163

APD ATTATCHMENT

Mewbourne Oil Company Chalk Bluff Federal Comm. #3 NM-016788
1980' FSL & 990' FEL Sec. 1-T18S-R27E Eddy County, NM.

1.) Casing Design and Safety Factors (See schedule 1 for used casing design program.)

2.) Cement Program for Casing Strings.

Surface Casing:
250 sacks of Class "C" containing 2% $CaCL_2$ + 1/4#/sack of cellophane flakes followed by 200 sacks of Class "C" containing 3% $CaCL_2$.

Intermediate Casing:
700 sacks of Class "C" containing 6% gel + 2% $CaCL_2$ + 1/2#/sack of cellophane flakes + 5#/sack of Gilsonite followed by 200 sacks of CLass "C" containing 3% $CaCL_2$

Production Casing:
A cement diverter tool (D. V. Tool) will be run at a depth of approximately 7500' from surface.
1st Stage:
850 sacks of Class "H" containing 5#/sack KCL + .7% fluid loss additive + 5#/sack compressive strength extender.
2nd Stage:
900 sacks of Class "C" Lite containing 1/2#/sack cellophane flakes + 5#/sack Gilsonite + .4% fluid loss extender followed by 100 sacks of Class "H" containing .4% fluid loss additive + 5#/sack compressive strength extender.

3.) Drilling time will require approximately 35 - 40 days and drilling operations should begin approximately November 1, 1992.

4.) The possibility of encountering H_2S gas in this area remote. Mewbourne Oil Company has drilled offset wells to this proposed location and none of these wells have encountered any H_2S gas in the Pennsylvanian. In the event H_2S is encountered, the necessary H_2S safety equipment will be installed on location to provide for a safe working enviroment.

5.) Anticipated formation temperature and pressure in the Morrow zone will be approximately 155 degrees fahrenheit and 3,000# psi.

6.) This location is a non-standard location. A hearing is scheduled for October 15, 1992 in Santa Fe, New Mexico before the New Mexico Oil Conservation Division for an unorthodox location exception.

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

SCHEDULE ONE

LEASE NAME: CHALK BLUFF FEDERAL #3 **TYPE OF CSG STRING:** PRODUCTION

LEGALS: SEC 1-18S-27E **DEPTH OF CSG:** 10,300

CASING MINIMUM PERFORMANCE PROPERTIES

	CSG TYPE	K-FACTOR	COLLAPSE	BURST	TENSION
1	5 1/2" 20# N-80 LT&C	991,000	8830	9190	428000
2	5 1/2" 17# N-80 LT&C	844,000	6380	7740	348000
3	5 1/2" 20# N-80 LT&C	991,000	8830	9190	428000
4					
5					

GRADE OF CASING: 85 % OF NEW

	CSG TYPE	COLLAPSE	BURST	TENSION
1	5 1/2" 20# N-80 LT&C	7506	7812	363800
2	5 1/2" 17# N-80 LT&C	5423	6579	295800
3	5 1/2" 20# N-80 LT&C	7506	7812	363800
4	0	0	0	0
5	0	0	0	0

SETTING DEPTH (WT. OF CSG IN AIR)

	FROM	TO	CASING WT. (LB/FT)	INTERVAL LGTH (FT.)	INTERVAL WT. (LBS)	CUMMULATIVE WT. (LBS)
1	0	1,000	20	1000	20,000	181,100
2	1,000	9,300	17	8300	141,100	161,100
3	9,300	10,300	20	1000	20,000	20,000
4	0			0	0	0
5	0			0	0	0

WELLBORE CONDITIONS

MUD WEIGHT: 9.6 PPG

BOUYANCY FACTOR 0.853 (AIR = 1)

DISPLACEMENT FLUID WT: 8.5 PPG

	DEPTH	ANNULAR HYDROSTATIC PRESSURE	COLLAPSE W/AXIAL LOADING	HOLE HYDROSTATIC PRESSURE	TENSION
	0	0		0	154,478
1	1000	499	5982	442	137,418
2	9300	4643	5290	4111	17,060
3	10300	5142	7506	4553	0
4	0	0	ERR	0	0
5	0	0	ERR	0	0

FINIAL CASING DESIGN **SAFTEY FACTORS**

		FROM	TO	LENGTH	COLLAPSE >1.125	BURST >1.00	TENSION >2.00
0		0	0	0	ERR	ERR	ERR
0		0	0	0	ERR	ERR	ERR
5	1/2" 20# N-80 LT&C	10,300	9,300	1000	1.460	1.716	21.325
5	1/2" 17# N-80 LT&C	9,300	1,000	8300	1.139	1.600	2.153
5	1/2" 20# N-80 LT&C	1,000	0	1000	11.983	17.673	2.355

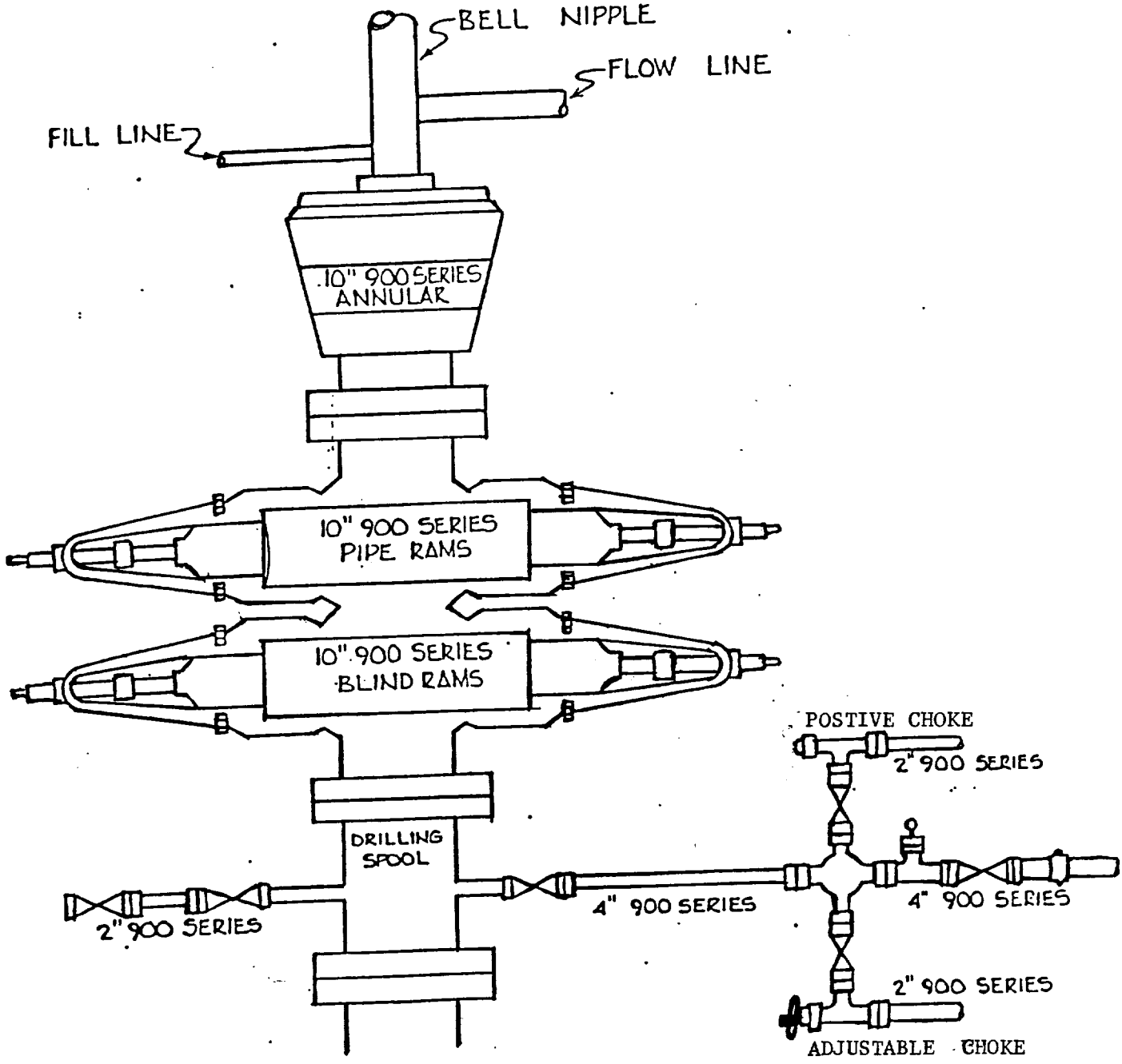
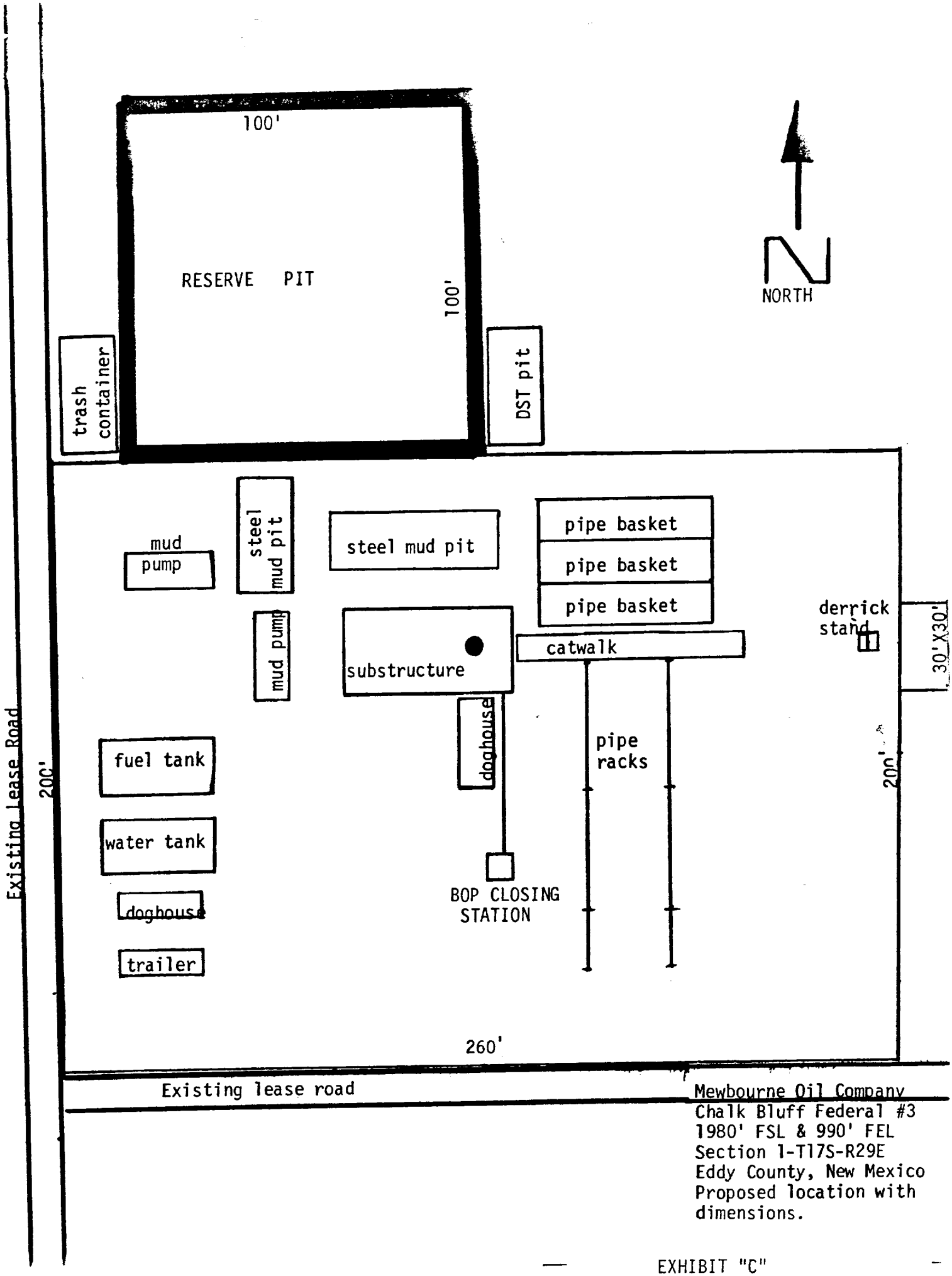


EXHIBIT "D"

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



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

EXHIBIT "C"

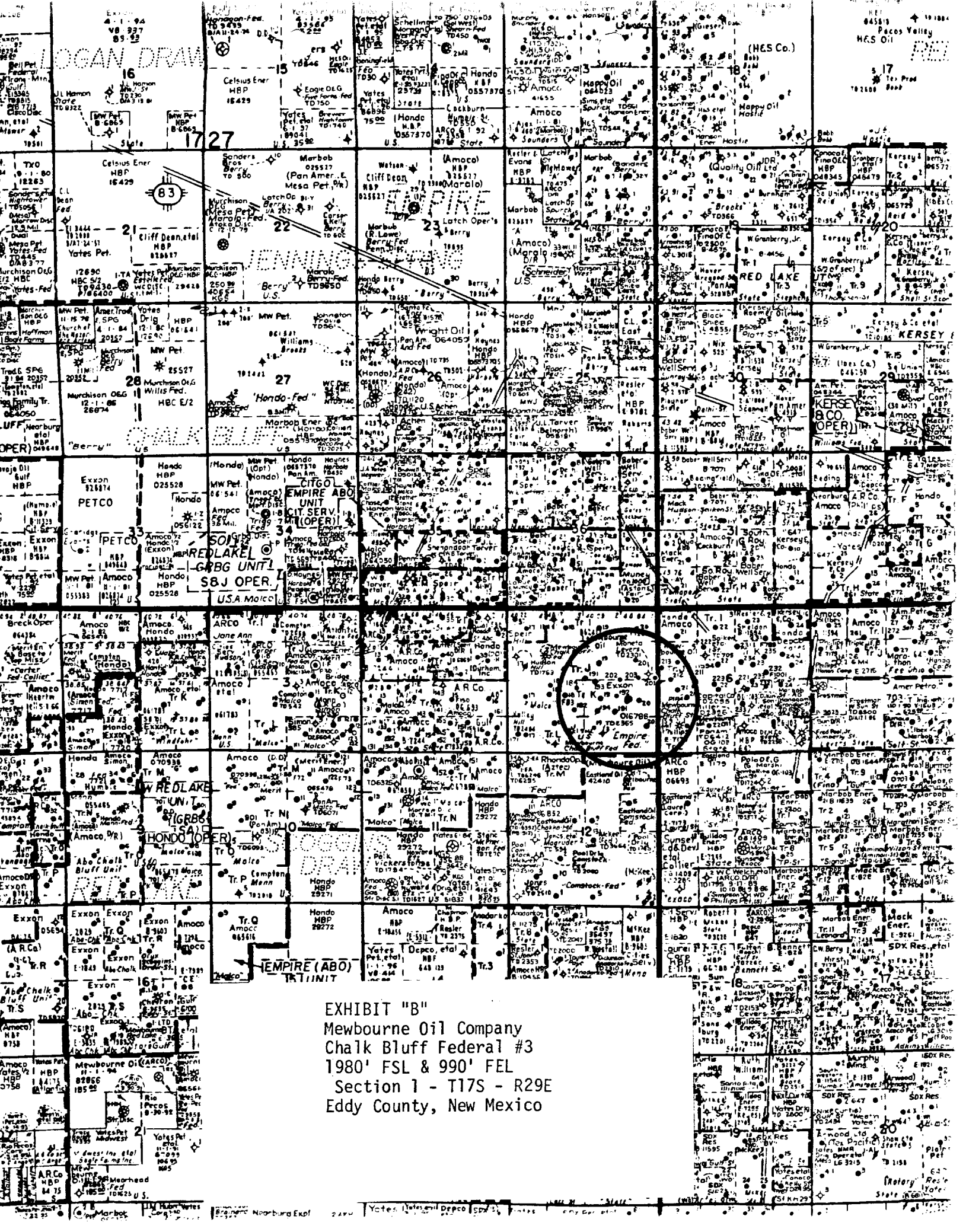


EXHIBIT "B"
Mewbourne Oil Company
Chalk Bluff Federal #3
1980' FSL & 990' FEL
Section 1 - T17S - R29E
Eddy County, New Mexico

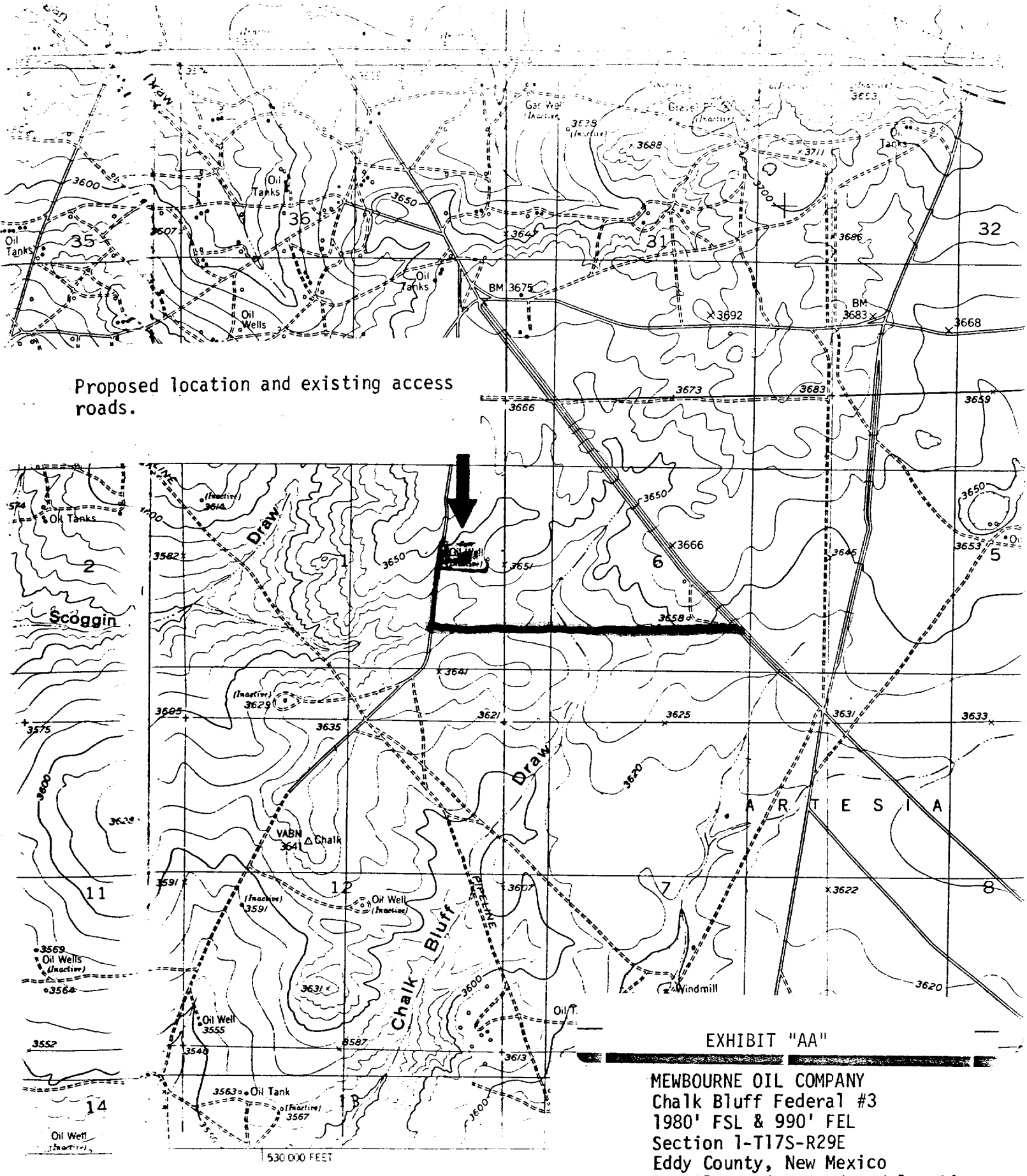


EXHIBIT "AA"

[redacted]

MEWBOURNE OIL COMPANY
Chalk Bluff Federal #3
1980' FSL & 990' FEL
Section 1-T17S-R29E
Eddy County, New Mexico
Detail Map for road and location.

Existing Roads [redacted]

Proposed Location

ped, edited ... ished by the Geological Survey

ol by USGS ... GS

re and dra... 1946. T... planimetric surveys 1955

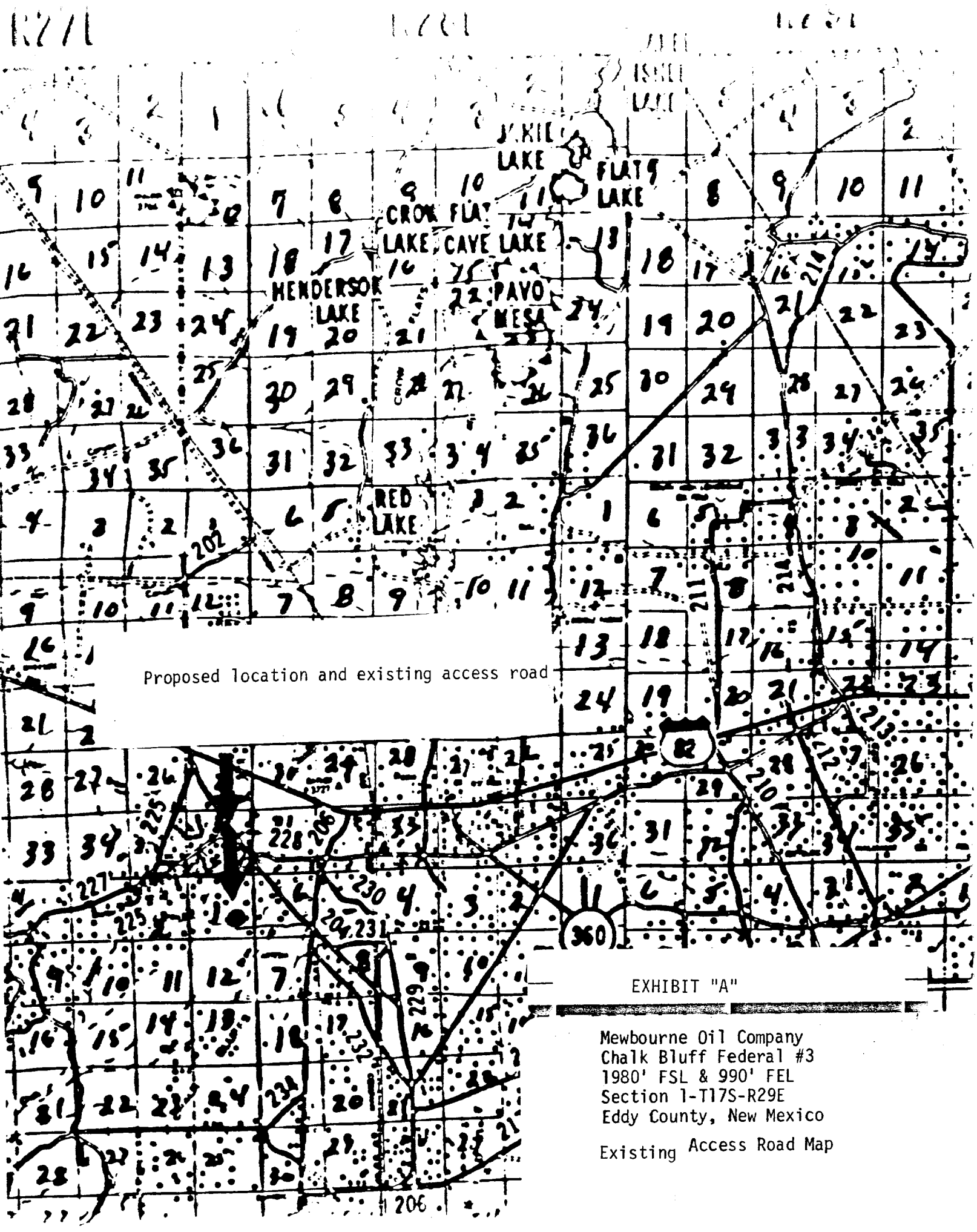


EXHIBIT "A"

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

Existing Access Road Map

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

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised 1-1-89

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
MEWBOURNE OIL COMPANY	CHALK BLUFF FEDERAL	3

Unit Letter	Section	Township	Range	County
I	1	18 SOUTH	27 EAST NMPM	EDDY

Actual Footage Location of Well: 1980 feet from the SOUTH line and 990 feet from the EAST line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3628	Morrow	North Illinois Camp Morrow	320 Acres

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

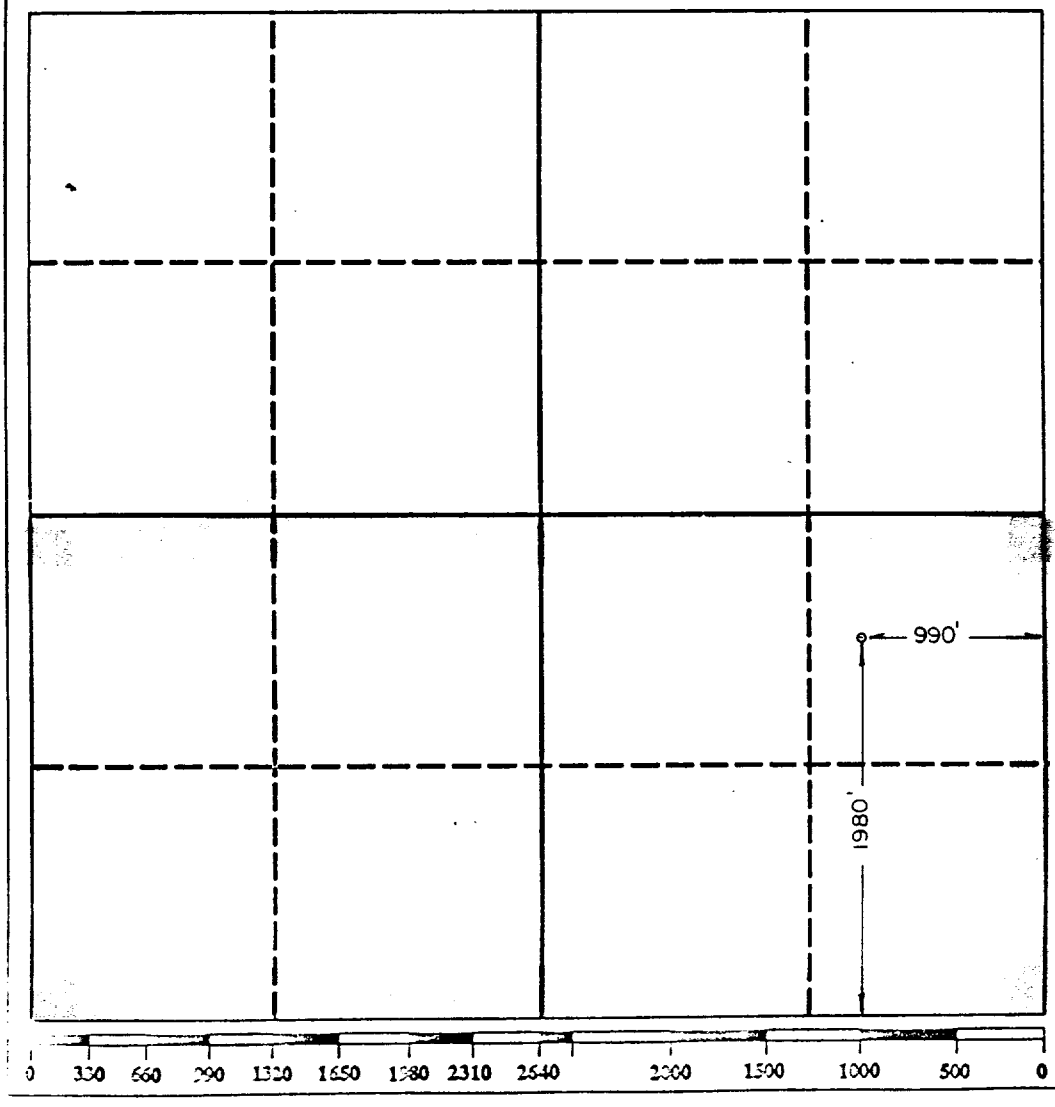
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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

[XX] Yes [ ] No If answer is "yes" type of consolidation Communitization

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

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



OPERATOR CERTIFICATION

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

Signature: Bill Pierce

Printed Name: Bill Pierce

Position: Drilling Superintendent

Company: Mewbourne Oil Company

Date: August 31, 1992

SURVEYOR CERTIFICATION

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

Date Surveyed: 8/26/92

Signature & Seal of Professional Surveyor: STATE OF NEW MEXICO HERSCHEL L JONES TEXAS

Certificate No. 3640

12. CERTIFICATION:

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

September 9, 1992

Kelly Ryan
District Superintendent
MEWBOURNE OIL COMPANY

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

Water: Possible surface water between 100' - 300'.
Oil: Penrose @ 1520'
Gas: Wolfcamp @ 6900'

D. Proposed Casing Program: See Form 3160-3

E. Pressure Control Equipment: See Form 3160-3 and Exhibit "D".

F. Mud Program: See Form 3160-3.

G. Auxiliary Equipment: Mud-gas seperator, PVT system, and Hydraulic choke from 6,000' to T.D.

H. Testing and Coring Program: Possibility of 4 DST's in the following zones: Wolfcamp, Cisco, Strawn, Morrow. No cores are planned at this time.

I. Logging: Gamma Ray - Spectral Density Dual Spaced Neutron Log from T.D. to surface.
Gamma Ray - Dual LaterLog - Micro Guard Log from T. D. to Intermediate casing.

J. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to accomodate the increased pressures.

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

11. <u>OPERATOR'S REPRESENTATIVES:</u>

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

Kelly Ryan	(505) 393-5905	Box 5270
Bill Pierce	24. hour aswering	Hobbs, NM
Greg Milner	service.	88241

7. ANCILLARY FACILITIES:

A. None required.

8. WELLSITE LAYOUT:

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

B. A 400' X 400' area has been flagged surround- the staked well.

9. PLANS AND RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations, all equipment not needed for producing operations will be removed. Pits will be filled in after all fluids have evaporated and the location cleaned of all trash and junk to leave the wellsite in an asthetically pleasing condition as reasonably possible. All production facilities left on location will be painted to conform with BLM painting regulations within 120 days of completion.

10. OTHER INFORMATION:

A. The geologic surface formation is hard clay interspersed with sand and chert outcroppings. Vegatative covering is generally sparse except in low-lying areas where grass is prevelant. Other vegatative covering consists mostly of greasewood and bear grass.

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

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

4. LOCATION AND TYPE OF WATER SUPPLY:

A. Water will be purchased from trucking companies servicing this area and will be trucked to the wellsite over existing and/or proposed roads shown on Exhibits "A" and "AA".

5. LOCATION OF CONSTRUCTION MATERIALS:

A. Caliche for construction of the location and any needed road repairs hopefully will come from the location itself. If this is not possible, caliche will be taken from a BLM pit located in the NE4/NW4 of Sec. 12-T18S-R27E which is BLM pit #18271203. This pit also extends into the SE4/SW4 of Sec. 1-T18S-R27E which is BLM pit # 18270114. An alternative pit which may be used in the event BLM pit #18271203 contains unsuitable material is a BLM pit located in the SW4/NE4 of Sec. 1-T18S-R27E which is BLM pit #18270107.

6. METHODS OF HANDLING WASTE DISPOSAL:

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

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

C. Water used and produced during stimulation, production testing, squeezing opeations etc. will be disposed of in the drilling pits. Oil produced during tests will be stored on site in steel test tanks until sold.

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

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

F. All trash and debris will be buried or removed from the wellsite within 90 days after drilling and/or completion operations have ceased.

MULTI-POINT SURFACE USE AND OPERATING PLAN
MEWBOURNE OIL COMPANY
CHALK BLUFF FEDERAL WELL NO. 3
1980' FSL & 990' FEL OF SEC. 1-T18S-R30E
EDDY COUNTY, NEW MEXICO
NEW MEXICO LEASE NO. NM-016788

This plan is submitted with the Application for Permit to Drill (APD) the above captioned well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities, operations plan and the magnitude of necessary surface disturbance involved, so that a complete, comprehensive appraisal can be made as to the enviromental effects associated with this operation. The surface is owned by the Federal Government and is managed by the Bureau of Land Management.

1. EXISTING ROADS:
   A. From the junction of U. S. 82 and U. S. 285 Highways in Artesia, proceed east on U. S. 82 12 miles. Turn right (south) on Eddy County Road #206 (Illinois Camp Road) and proceed south for 1.75 miles. Turn right (northwest) on Eddy County Road #204 and proceed .75 miles. Turn left (west) on caliche lease road and proceed 1 mile. Turn right (north) 100 yards on caliche lease road and location will be on the right hand side of the lease road. (Exhibit "A" & "AA")

   B. Culverts: None required

   C. Cuts and Fills: A two foot cut will be required to construct the location.

   D. Turn-Outs: None required.

   E. Gates or Cattleguards: None required.

2. LOCATION OF EXISTING WELLS

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

3. LOCATION OF PROPOSED ACTIVITIES:

   A. If the well is productive, all production facilities will be constructed on the existing pad.

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

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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

30-015-27163

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.: NM-~~016788~~ 0557371

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

7. UNIT AGREEMENT NAME:

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

8. FARM OR LEASE NAME: Chalk Bluff Fed. Comm.

2. NAME OF OPERATOR: Mewbourne Oil Company

RECEIVED OCT 19 1992 O. C. D. ARTESIA OFFICE

9. WELL NO.: 3

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

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FSL and 990' FEL
At proposed prod. zone: Same

Unit I

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 1-T~~17S~~ 18S ~~R29E~~ 27E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 12 miles southeast of Artesia, New Mexico

12. COUNTY OR PARISH: Eddy 13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 990'

16. NO. OF ACRES IN LEASE: 320

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

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 2040'

19. PROPOSED DEPTH: 10,300'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3628' GR

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

23. PROPOSED CASING AND CEMENTING PROGRAM

No Water Basin

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	61#	400' ±	450 sks. Class C circulated
12 1/4"	9 5/8"	36#	2,600' ±	800 sks. Tie back into surface.
8 3/4"	5 1/2"	17 & 20#	10,300' ±	600 sks. of Class "H" SEE STIPS.

Part ID-1
10-16-92
New Doc + API

Mud Program:

0-400' Spud mud with fresh water gel and lime. LCM as needed.
400' - 2600' Fresh water gel and lime. LCM as needed.
2,600' - 8500' Cut brine with lime for pH control. Wt. 9.2 - 9.6# ppg, WL - NC. LCM as needed.
8,500 - 10.300' Cut brine with Drispac, salt gel, lime, soda ash, and starch. Wt. 9.2 - 9.6 ppg. WL 10 CC or less. Raise weight accordingly if abnormal pressures are encountered.

BOP PROGRAM:

900 series BOP and Hydrill on 13 3/8" surface casing and on 9 5/8" intermediate casing.

Gas is not dedicated.

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

24.

SIGNED Kelly Pryor TITLE District Superintendent DATE 09/09/1992

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 10-16-92

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

BUREAU OF LAND MANAGEMENT RECEIVED SEP 10 1992 DIST. 6 N.M. Carlsbad

*See Instructions On Reverse Side

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

INSTRUCTIONS

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

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

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

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

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

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

NOTICE

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

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

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

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

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

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

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

This information will be used to analyze and approve applications.

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

RECEIVED

JAN 04 1993

O. C. D.
ARTESIA, OFFICE

dsf

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

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

7. If Unit or CA, Agreement Designation

SUBMIT IN TRIPLICATE

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

8. Well Name and No.
Chalk Bluff Federal ~~Comm. #3~~

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
3001527163

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

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & 990' FEL
Sec. 1-T18S-R27E

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

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

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
■ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	■ Other Spud well & cemented 13-3/8" surf. csg.	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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

Spudded well @ 4:00 p.m. MST 11/24/92. Drilled 17-1/2" surface hole to 400' KB. Ran 10 joints of 13-3/8", 54.50#, New LS, ST&C casing and set @ 400' KB. Western cemented w/100 sks. Class "H" cement containing 12% Thixad + 3% CaCl2 followed by 265 sks. of Class "C" containing 6% Gel + 3% CaCl2 + 1/4 pps celloseal + 5 pps gilsonite followed by 150 sks. of Class "C" neet containing 3% CaCl2. Circulated 50 sks. of cement to the pit. Job complete @ 5:30 a.m. 11/25/92.

BUREAU OF LAND MANAGEMENT
RECEIVED
DEC 07 1992
CARLSBAD, NEW MEXICO

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

Signed Bill Pierce Title Drilling Supt. Date 12/02/92

(This space for Federal or State office use)

Approved by David R. Glass Title Date
Conditions of approval, if any:

1992

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

*See Instruction on Reverse Side

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

SPECIFIC INSTRUCTIONS

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

Item 13—Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

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

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE — The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

ROUTINE USES:

(1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.

(2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).

(3) Analyze future applications to drill or modify operations in light of data obtained and methods used.

(4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION — Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

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

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

*U.S. GPO: 1990-773-016/26019

C/SF

RECEIVED

JAN 04 1993

O. C. D.
ARTESIA, OFFICE

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other
8. Well Name and No.: Chalk Bluff Federal Comm. #3
2. Name of Operator: Mewbourne Oil Company
9. API Well No.: 3001527163
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905
10. Field and Pool, or Exploratory Area: N. Illinois Camp Morrow
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 1980' FSL & ~~1980~~ 660' FEL, Sec. 1-T18S-R27E
11. County or Parish, State: Eddy Co., New Mexico

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

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
■ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	■ Other Cement 9-5/8" Inter. Casing	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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

Drilled 12-1/4" Intermediate hole to 2600' KB. Ran 59 joints of 9-5/8", 36#, New LS, ST&C casing and set @ 2600' KB. Western cemented with 590 sacks of Class "C" lite containing 6% gel + 10 pps NaCl + 1/4 pps celloseal followed by 250 sacks of Class "C" containing 2% CaCl2. Circulated 50 sacks of cement to the pit. Job complete @ 11: 50 p.m. 11/29/92.

BUREAU OF LAND MANAGEMENT
RECEIVED
DEC 07 1992
CARLSBAD, NEW MEXICO

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

Signed: Bill Pierce Title: Drilling Supt. Date: 12-02-92

(This space for Federal or State office use)

Approved by: David R. Glass Title: Date:

Conditions of approval, if any:

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

*See Instruction on Reverse Side

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

SPECIFIC INSTRUCTIONS

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

Item 13—Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

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

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE — The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

ROUTINE USES:

(1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.

(2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).

(3) Analyze future applications to drill or modify operations in light of data obtained and methods used.

(4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION — Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

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

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

*U.S. GPO: 1990-773-016/26019

95F

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
8. Well Name and No.: Chalk Bluff Fed. Comm. 3
9. API Well No.: 30-015-27163
10. Field and Pool, or Exploratory Area: N. Illinois Camp Morrow
11. County or Parish, State: Eddy

1. Type of Well: ☐ Oil Well ■ Gas Well ☐ Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 1980' FSL & ~~1980'~~ 990' FEL
Sec. 1-T18S-R27E

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

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
■ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	■ Other Cement 7" casing	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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

Lost complete returns @ 7683'. Dry drilled 8-3/4" hole to 8968'. Ran 226 Jts. of 7", 26# & 29#, N-80 & S-95 grade used API casing and set @ 8968'. Multiple stage cementer @ 6997' and external casing packer @ 7026'. Western cemented the first stage w/350 sks. of Class "H" containing 8 pps CSE + .75% CF-14 + 5 pps Gilsonite + .35% Thrifty Lite. Set ECP and opened DV tool. Cemented 2nd stage w/750 sks. of Class "C" containing 1 pps celloseal + 5 pps gilsonite + 3% salt followed by 100 sks. of Class "H" Neet. Plug down to 6997' @ 2:45 a.m. 12/26/92

ACCEPTED FOR RECORD
(ORIG. SGD.) DAVID R. GLASS
FEB 4 1993
CARLSBAD, NEW MEXICO

RECEIVED
JAN 25 9 40 AM '93
CARLSBAD AREA OFFICE

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

Signed: Bill Pierce Title: Drilling Superintendent Date: 01/20/93

(This space for Federal or State office use)

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

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

*See Instruction on Reverse Side

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

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

2. Name of Operator
Mewbourne Oil Company

3. Address and Telephone No.
P.O. Box 5270 Hobbs, New Mexico 88241

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & ~~1980'~~ 990' FEL
Sec. 1-T18S-R27E

8. Well Name and No.
Chalk Bluff Fed. Comm. #3

9. API Well No.
30-015-27163

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

11. County or Parish, State
Eddy

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

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
■ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	■ Other Run 4-1/2" Liner	☐ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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

Drilled well to a total depth of 10,150' w/6" hole, ran 45 jts. of 4-1/2", 11.6#, N-80, used API casing and hung liner from 8599' to 10,150'. Western cemented w/200 sks. of Class "H" containing 5 pps CSE + 20 pps SF-3 + .9% CF-14 + 1 gal./ 100 sacks of Klay-Treat. Plug down to 10,113' @ 5:00 a.m. 01/06/93. Released rig and moved off location. 01/08/93

ACCEPTED FOR RECORD
(ORIG. SGD.) DAVID R. GLASS
FEB 4 1993

RECEIVED
JAN 25 9 40 AM '93
CARLSBAD AREA OFFICE

14. I hereby certify that the foregoing is true and correct
Signed Bill Pierce Title Drilling Superintendent Date 01/21/93

(This space for Federal or State office use)

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

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

*See Instruction on Reverse Side

SEC 1 TWN 18 RGE 27 API # 30-015-27163

OPERATOR MEWBOURNE OIL CO

WELL NAME CHALK BLUFF FED COM #3

STATE OCD TOPS AS PER MARK ASHLEY DATE 1-25-93

Southeastern New Mexico				Northwestern New Mexico			
T. Anhy		T. Canyon		T. Ojo Alamo		T. Penn. "B"	
T. Salt		T. Strawn	8932	T. Kirtland-Fruitland		T. Penn. "C"	
B. Salt		T. Atoka	9490	T. Pictured Cliffs		T. Penn. "D"	
T. Yates	450	T. Miss		T. Cliff House		T. Leadville	
T. 7 Rivers	565	T. Devonian		T. Menefee		T. Madison	
T. Queen	1159	T. Silurian		T. Point Lookout		T. Elbert	
T. Grayburg	1494	T. Montoya		T. Mancos		T. McCracken	
T. San Andres	1985	T. Simpson		T. Gallup		T. Ignacio Otzte	
T. Glorieta	3535	T. McKee		Base Greenhorn		T. Granite	
T. Paddock		T. Ellenburger		T. Dakota		T.	
T. Blinebry		T. Gr. Wash		T. Morrison		T.	
T. Tubb	4760	T. Delaware Sand		T. Todilto		T.	
T. Drinkard		T. Bone Springs		T. Entrada		T.	
T. Abo	5745	T. MORROW LS	9710	T. Wingate		T.	
T. Wolfcamp	6475	T.		T. Chinle		T.	
T. Penn	7970	T.		T. Permain		T.	
T. Cisco (Bough C)		T.		T. Penn "A"		T.	

OIL OR GAS SANDS OR ZONES

No. 1, from ..... to ..... No. 3, from ..... to .....

No. 2, from ..... to ..... No. 4, from ..... to .....

IMPORTANT WATER SANDS

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

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

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

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

REMARKS:

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

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

RECEIVED
JAN 2 4 1993
O. C. D.
ARTESIA, NEXT

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator	Well API No.
Mewbourne Oil Company	30-015-27163

Address: P.O. Box 5270 Hobbs, New Mexico 88241

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

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

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

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Chalk Bluff Federal Comm.	3	North Illinois Camp Morrow	State, Federal or Fee	NM-0557371

Location: Unit Letter I : 1980 Feet From The South Line and 990 Feet From The East Line

Section 1 Township 18S Range 27E, NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [ ] or Condensate [X]	Address (Give address to which approved copy of this form is to be sent)
Amoco Pipeline IPC	502 N. West Ave. Levelland, Tx. 79336-3914
Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [X]	Address (Give address to which approved copy of this form is to be sent)
Transwestern Pipeline Company	P.O. Box 1188 Houston, Texas 77251

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When ?
	I	1	18S	27E	Yes	01/15/93

If this production is commingled with that from any other lease or pool, give commingling order number: None

IV. COMPLETION DATA

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

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
11/24/92	01/16/93	10,150'	10,102'
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
KB 3643' DF 3641' GL 3628'	Lower Morrow	9950'	9972'
Perforations			**Depth Casing Shoe**
9950'-9954' 9957'-9972'			10,150'

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17-1/2"	13-3/8" 54.5#	400'±	100 sacks Port ID-2
12-1/4"	9-5/8" 36#	2,600'	250 sacks 2-12-93
8-3/4"	7" 26#	8,968'	1200 sacks comp 4 B/5
6"	4-1/2" Liner 11.6#	8,600' to 10,150'	200 sacks

V. TEST DATA AND REQUEST FOR ALLOWABLE

2-3/8" & 2-7/8"

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

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

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
2000 MCF/D	24 Hrs.	30 : 1	N/A
Testing Method (pitot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
Back Pressure	2850	0	10/64"

VI. OPERATOR CERTIFICATE OF COMPLIANCE

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

R. A. Jones

Signature: Robert A Jones — Printed Name
Engineer — Title
01/19/93 — Date
(505) 393-5905 — Telephone No.

OIL CONSERVATION DIVISION

Date Approved JAN 2 9 1993

By ORIGINAL SIGNED BY MIKE WILLIAMS

Title SUPERVISOR, DISTRICT II

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

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

LTR

Job separation sheet

Form 3160-4
(October 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

FORM APPROVED
OMB NO. 1004-0137
Expires: December 31, 1991

5. LEASE DESIGNATION AND SERIAL NO.
NM-0557371

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
Chalk Bluff Fed. Comm. #3

9. API WELL NO.
30-015-27163

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

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 1-T18S-R27E

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other

CONFIDENTIAL

2. NAME OF OPERATOR
Mewbourne Oil Company

3. ADDRESS AND TELEPHONE NO.
P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface 1980' FSL & 990' FEL
At top prod. interval reported below
At total depth Same

14. PERMIT NO. | DATE ISSUED

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

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
11/24/92	01/06/93	01/16/93	KB 3643' DF 3641' GL 3628'	3628'

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
10,150'	10,102'		→	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
9950'-9954', 9957'-9972' Lower Morrow Orange Sand

25. WAS DIRECTIONAL SURVEY MADE: Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN
SDL-DSN Dual-Latero-MFSL-GR Sonic CBL

27. WAS WELL CORED: No

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

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.5#	400'±	17-1/2"	100 sx. Class "H"	None
9-5/8"	36#	2,600'±	12-1/4"	250 sx. Class "C"	None
7"	26 & 29#	8,968'	8-3/4"	1200 sx. Class "C & H"	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
4-1/2"	8600'	10,150'	200 sxs.	None

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	9972'	9797'
2-3/8"		

31. PERFORATION RECORD (*Interval, size and number*)
9950'-9954' 9957'-9972'
4 SPF 19' 76 holes

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
9950'-9954'	None
9957'-9972'	None

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
01/16/93	Flowing	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
01/16/93	24	10/64"	→	50	2000	0	40 MCF/BBL

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
2720	0	→	60	2000	0	

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

TEST WITNESSED BY
R. Jones

35. LIST OF ATTACHMENTS
Logs- * Please hold in confidence

ACCEPTED FOR RECORD
FEB 4 1993

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

SIGNED R. Gore TITLE Engineer DATE 01/21/93

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

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
M. Morrow	9950'	9972'	Sandstone

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Yates	450'	
7 Rivers	564'	
Queen	1159'	
Grayburg	1492'	
San Andres	1985'	
Glorieta	3536'	
Tubb	4760'	
Drinkard	5524'	
Abo	5744'	
Wolfcamp	6474'	
Cisco	7686'	
Canyon	8440'	
Strawn	8932'	
Atoka	9490'	
Morrow	9594'	
Morrow Clastic	9800'	
L. Morrow	9911'	

U.S. GPO:1991-575-735/45086

KEN REYNOLDS—PRESIDENT
ARNIE NEWKIRK—VICE-PRESIDENT

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

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

January 06,1993

Mewbourne Oil Company
P.O. Box 5270
Hobbs, N.M. 88240

RE: Chalk Bluff Federal #3

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

400' - 3/4°	5033' - 2 3/4°	5813' - 4°
887' - 1°	5096' - 3°	5875' - 4°
1359' - 1°	5158' - 3°	5967' - 3 3/4°
1864' - 2°	5222' - 3 1/4°	6094' - 3 3/4°
2336' - 1 1/2°	5283' - 3 3/4°	6217' - 3 1/4°
2600' - 3/4°	5346' - 3 3/4°	6720' - 3 1/2°
2792' - 1 1/4°	5409' - 4°	7213' - 3°
3086' - 1°	5464' - 4 1/4°	7685' - 2 1/2°
3580' - 1 1/3°	5555' - 4 1/4°	8155' - 2 1/4°
4079' - 1°	5587' - 4 1/4°	8654' - 2°
4358' - 1 3/4°	5650' - 4 1/4°	9003' - 2°
4846' - 2 3/4°	5719' - 4 1/2°	9509' - 1/4°
		9837' - 3/4°
		10150' - 1 3/4° TD

Sincerely,

Gary W. Chappell
Contracts Manager

STATE OF NEW MEXICO)
)
COUNTY OF CHAVES)

The foregoing was acknowledged before me this 06th day of January 1993 by Gary W. Chappell.

MY COMMISSION EXPIRES

October 07,1996

Linda Rogers
NOTARY PUBLIC

COMPANY :MEWBOURNE OIL LEASE :CHALK BLUFF FED.COMWELL NO. : 3

UNIT :I SECTION : 1 TOWNSHIP : 18

L : 9961 H : 9961 L/H : 1 G/GMIX : 0.849

%CO2 : 0.42 %N2 : 0.33 H2S : DATE :

d : 2.278 Fr :0.012892 GH : 8456.9 RANGE : 27

VOL 1 : 655 PSIA 1 : 2243.2 RESV.TEMP 173.6

VOL 2 : 1310 PSIA 2 : 2193.2

VOL 3 : 2283 PSIA 3 : 2113.2 SHUT-IN PR= 2273.2

VOL 4 : 3294 PSIA 4 : 2013.2

PCR : 668

TCR : 401

	LINE	RATE 1		RATE 2		RATE 3		RATE 4	
		'1ST	'2ND	'1ST	''2ND	'1ST	'2ND	'1ST	'2ND
1	QM	0.655	0.655	1.310	1.310	2.283	2.283	3.294	3.294
2	TW	534	534	534	534	534	534	534	534
3	Ts	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6
4	T	583.8	583.8	583.8	583.8	583.8	583.8	583.8	583.8
	PR (est)	3.36		3.28		3.16		3.01	
5	Z(est)	0.727	0.738	0.727	0.736	0.723	0.733	0.731	0.730
6	TZ	424.5	430.8	424.6	429.5	425.2	427.7	426.5	426.0
7	GH/TZ	19.924	19.629	19.918	19.691	19.891	19.774	19.829	19.852
8	eS	2.111	2.088	2.110	2.093	2.108	2.099	2.104	2.105
9	1-e-S	0.526	0.521	0.526	0.522	0.526	0.524	0.525	0.525
10	Pt	2243.2	2243.2	2193.2	2193.2	2113.2	2113.2	2013.2	2013.2
11	Pt2 /1000	5031.9	5031.9	4810.1	4810.1	4465.6	4465.6	4053.0	4053.0
12	Fr	0.012892	0.012892	0.012892	0.012892	0.012892	0.012892	0.012892	0.0128924
13	Fc=FrTZ	5.472	5.555	5.474	5.537	5.481	5.514	5.498	5.492
14	FcQm	3.58	3.64	7.17	7.25	12.51	12.59	18.11	18.09
15	L/H(FcQm)	12.8	13.2	51.4	52.6	156.6	158.5	328.0	327.3
16	Fw	6.761363	6.396563	27.05758	27.47157	32.32401	32.97298	172.0865	171.83059
17	Pw2	5038.7	5038.8	4837.2	4837.6	4547.9	4548.6	4225.1	4224.8
18	Ps2	10636.7	10519.8	10208.7	10123.1	9588.7	9547.9	8897.4	8894.3
19	Ps	3261.4	3243.4	3195.1	3181.7	3096.6	3090.0	2981.2	2982.3
20	P	2752.3	2743.3	2694.2	2687.4	2604.9	2601.6	2497.2	2497.8
21	Pr	4.12	4.11	4.03	4.02	3.90	3.89	3.74	3.74
22	Tr	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
23	Z	0.733	0.733	0.736	0.733	0.733	0.732	0.730	0.730

Pc = 2273.2 Pc2 = 5167.4

Pt2 = 5031.9 Pw = 2244.7
4810.1 2199.5
4465.6 2132.7
4053.0 2055.4

Pc2-Pw2= 128.6 Pw2 = 5038.8
329.8 4837.6
618.9 4548.6
942.6 4224.8

n = 0.884

Pc2/(Pc2-Pw2) = 40.184
15.666
8.350
5.482

[Pc2/Pc2-Pw2]n = 26.181
11.386
6.528
4.500

AOF= Q 17.148
14.915
14.903
14.823

Laboratory Services
1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Mewbourne Oil Co.
Attention: Mr. R.Jones
P. O. Box 5270
Hobbs, New Mexico 88240

SAMPLE IDENTIFICATION: Chalk Bluff #3
COMPANY: Mewebourne Oil Co.
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 3/4/93 12:30PM
ANALYSIS DATE: 03-05-93
PRESSURE - PSIG 530.0
SAMPLE TEMP. °F
ATMOS. TEMP. °F

GAS (XX) LIQUID ( )
SAMPLED BY: R. Jones
ANALYSIS BY: Rolland Perry

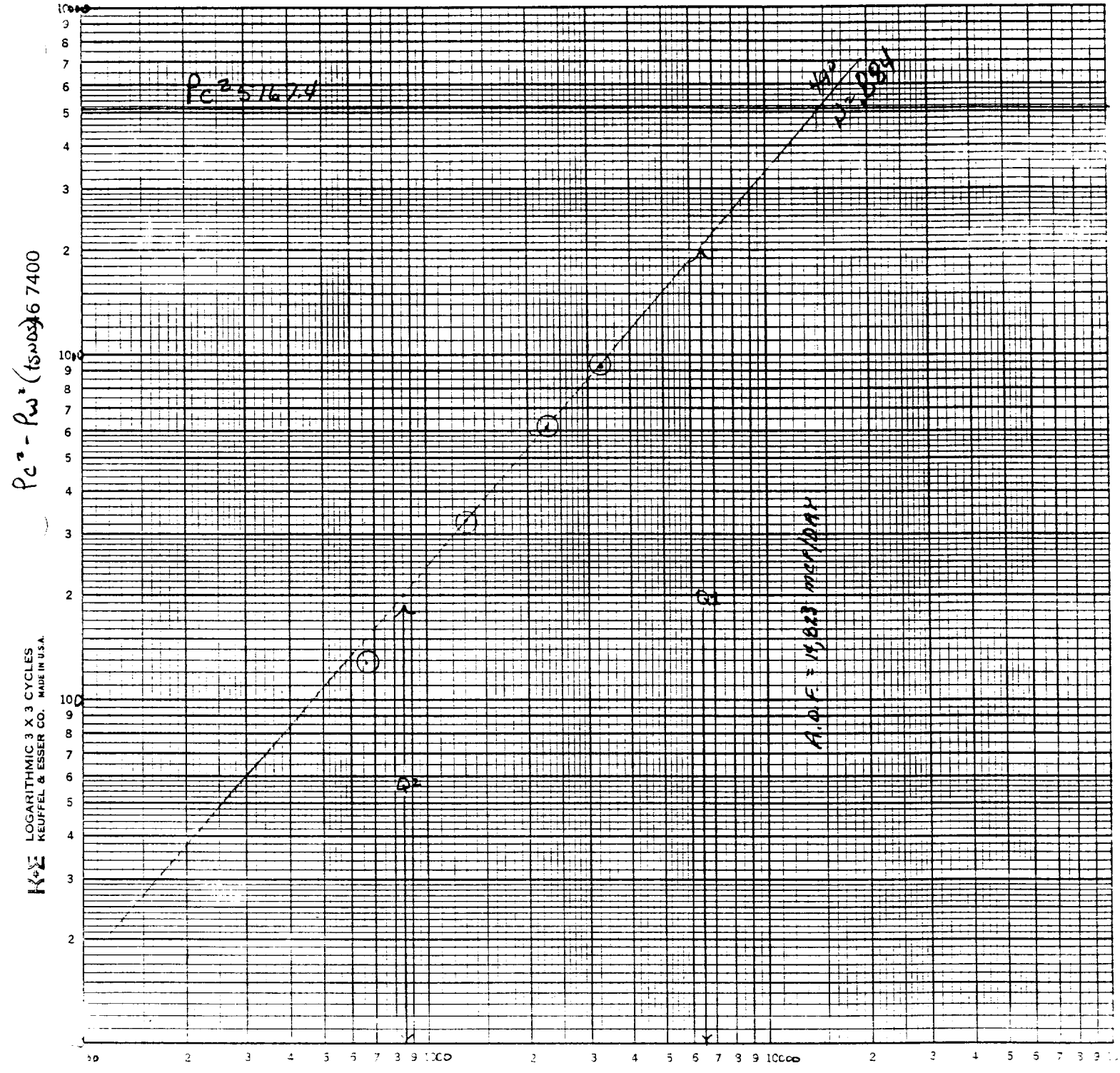
REMARKS:

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	0.33	
Carbon Dioxide	(CO2)	0.42	
Methane	(C1)	83.10	
Ethane	(C2)	8.14	2.164
Propane	(C3)	3.14	0.862
I-Butane	(IC4)	0.40	0.130
N-Butane	(NC4)	0.86	0.270
I-Pentane	(IC5)	0.39	0.140
N-Pentane	(NC5)	0.41	0.147
Hexane	(C6)	2.81	1.214
Heptanes Plus	(C7+)	0.00	0.000
		100.00	4.927

BTU/CU.FT. - DRY		1269	MOLECULAR WT.	21.1701
AT 14.650	DRY	1265		
AT 14.650	WET	1239	26# GASOLINE -	1.591
AT 15.025	DRY	1298		
AT 15.025	WET	1304		
SPECIFIC GRAVITY -				
CALCULATED		0.731		
MEASURED				

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



Q MCF/DAY

Log = 3.31291

Log = 2.92942

0155 File

RECEIVED

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

APR 93

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: MEWVOURNE OIL COMPANY				Lease or Unit Name: CHALK BLUFF FEDERAL COM.	
Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 3/4/93	Well No.: 3
Completion Date: 1/16/93	Total Depth: 10150	Plug Back TD: 10102		Elevation: GL 3628'	Unit Ltr. - Sec. - TWP - Rge.: I 1 18S 27E
Csg. Size: 4½	Wt.: 10.5	d: 4.052	Set At: 8600 10150	Perforations: From: 9950 To: 9954	County: EDDY
Tbg. Size: 2 7/8 / 2 3/8 &	Wt.: 4.7 & / 6.5	d: 1.91 / 2.441	Set At: 9972	Perforations: From: 9957 To: 9972	Pool: MORROW / NORTH ILLINOIS Comp
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: subgke			Packer Set At: 9797		Formation: MORROW
Producing Thru: tbg.	Reservoir Temp. °F: 133	Mean Annual Temp. °F: 60	Baro. Press - P_a: 13.2		Connection: Transwestern

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9950	9950	.731	.42	.33			3.068	flg.

FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2260		Pkr.		48 hr.
1.	3 X 1.500	530	5	148	2230		"		1 hr.
2.	3 X 1.500	530	19	124	2180		"		1 hr.
3.	3 X 1.500	535	52	88	2100		"		1 hr.
4.	3 X 1.500	540	102	70	2000		"		1 hr.
5.									

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F pv.	Rate of Flow Q, Mcfd
1.	11.13	52.12	543.2	.9248	1.170	1.043	655
2.	11.13	101.59	543.2	.9436	1.170	1.049	1310
3.	11.13	168.84	548.2	.9741	1.170	1.066	2283
4.	11.13	237.54	553.2	.9905	1.170	1.075	3294
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.81	608	1.52	.919
2.	.81	584	1.46	.909
3.	.82	548	1.37	.880
4.	.83	530	1.32	.865
5.				

Gas Liquid Hydrocarbon Ratio	23.63 Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons	57.0 Deg.	
Specific Gravity Separator Gas	.731	XXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	G Mix .849
Critical Pressure	668 P.S.I.A.	664 P.S.I.A.
Critical Temperature	401 R	441 R

P_c 2273.2 P_c^2 5167.4

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.	5031.9	2244.7	5038.8	128.6
2.	4810.1	2199.5	4837.6	329.8
3.	4465.6	2132.7	4548.6	618.9
4.	4053.9	2055.4	4224.8	942.6
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.4821$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4.500$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 14,823$

Absolute Open Flow 14,823 Mcfd @ 15.025 | Angle of Slope θ 49 | Slope, n .884

Remarks: 13.3 BBLS CONDENSATE PRODUCED DURING TEST

Approved By Division	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTERS	KS	KS

THE WESTERN COMPANY OF NORTH AMERICA

WATER ANALYSIS

HOBBS, NEW MEXICO LAB — ANALYSIS #: HB010251

GENERAL INFORMATION

OPERATOR:	Mewbourne Oil Company	DEPTH:	0
WELL:	Chalk Bluff Fed #3	DATE SAMPLED:	
FIELD:		DATE RECEIVED:	02/24/93
FORMATION:		SUBMITTED BY:	Leonard Pounds
COUNTY:	Eddy	WORKED BY:	M Keith
STATE:	NM	PHONE #:	505-392-5556

SAMPLE DESCRIPTION: all water

PHYSICAL AND CHEMICAL DETERMINATIONS

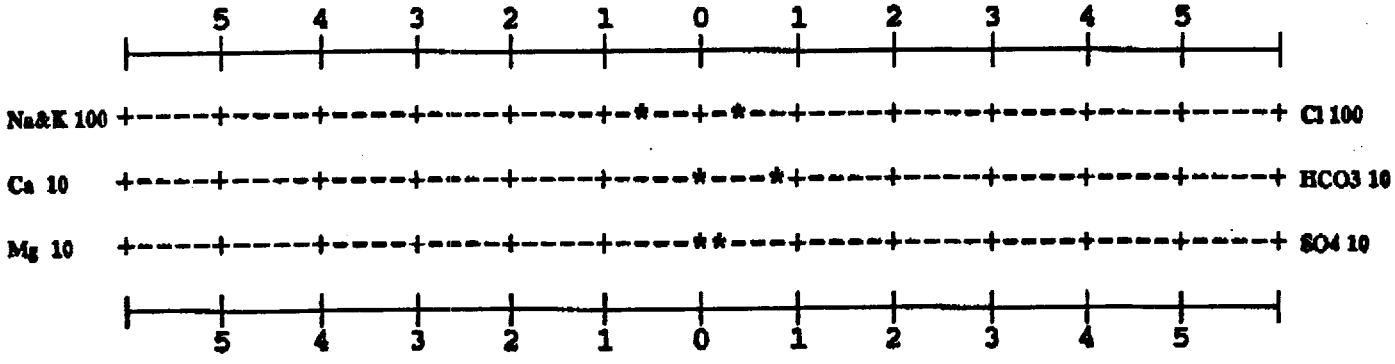
SPECIFIC GRAVITY: 1.003 @ 70 °F — PH: 6.75

RESISTIVITY (MEASURED): 3 OHMS @ 0 °F

IRON (FE++):	150 PPM	SULFATE:	100 PPM
CALCIUM:	10 PPM	TOTAL HARDNESS:	50 PPM
MAGNESIUM:	6 PPM	BICARBONATE:	487 PPM
CHLORIDE:	1595 PPM	SODIUM CHLORIDE (CALC)	2624 PPM
SODIUM+POTASS:	1243 PPM	TOT. DISSOLVED SOLIDS:	3474 PPM
KCL	:no trace	OIL	:none

REMARKS:

STIFF TYPE PLOT (IN MEQ/L)



ANALYST MK
M Keith

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

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

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

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

8. Well Name and No.
Chalk Bluff Fed. Com. #3

2. Name of Operator
Mewbourne Oil Company

RECEIVED

9. API Well No.
30-015-27163

3. Address and Telephone No.
P.O. Box 5270 Hobbs, New Mexico 88241

APR 26 1993

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & ~~1980~~ 990' FEL
Sec. 1-T18S-R27E

C.C.D.

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

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

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

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

1) Formation: Morrow
2) Amount of water produced 10 BW/mo.
3) Water analysis attached
4) Water is stored on lease in fiberglass tank
5) Produced water will be trucked by I & W Inc.
6) The disposal well is I & W Inc., Walter Solt #1, Unit Letter L, Section 5-T18S-R28E Eddy County, New Mexico

SWD #318

14. I hereby certify that the foregoing is true and correct
Signed [signature] Title Production Engineer Date March 4, 1993

(This space for Federal or State office use)
Approved by (ORIG. SGD.) DAVID R. GLASS Title PETROLEUM ENGINEER Date 4/22/93
Conditions of approval, if any:
SEE ATTACHED

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

*See Instruction on Reverse Side

COMPANY :MEWBOURNE OIL LEASE :CHALK BLUFF FED.COMWELL NO. : 3

UNIT :I SECTION : 1 TOWNSHIP : 19

L : 9961 H : 9961 L/H : 1 G/GMIX : 0.849

%CO2 : 0.42 %N2 : 0.33 H2S : DATE :

d : 2.278 Fr :0.012892 GH : 8456.9 RANGE : 27

VOL 1 : 655 PSIA 1 : 2243.2 RESV.TEMP 173.6

VOL 2 : 1310 PSIA 2 : 2193.2

VOL 3 : 2283 PSIA 3 : 2113.2 SHUT-IN PR= 2273.2

VOL 4 : 3294 PSIA 4 : 2013.2

PCR : 668

TCR : 401

	Pc = 2273.2		Pc2 =	5167.4					
	Pt2 = 5031.9		Pw =	2244.7					
	4810.1			2199.5					
	4465.6			2132.7					
	4053.0			2055.4					
	Pc2-Pw2= 128.6		Pw2 =	5038.8					
	329.8			4837.6					
	618.9			4548.6					
	942.6			4224.8					
	n =	0.884							
	Pc2/(Pc2-Pw2) =	40.184							
		15.666							
		8.350							
		5.482							
	[Pc2/Pc2-Pw2]n =	26.181							
		11.386							
		6.528							
		4.500							
	AOF= Q	17.148							
		14.915							
		14.903							
		14.823							

	LINE	RATE 1		RATE 2		RATE 3		RATE 4	
		'1ST	'2ND	'1ST	''2ND	'1ST	'2ND	'1ST	'2ND
1	QM	0.655	0.655	1.310	1.310	2.283	2.283	3.294	3.294
2	TW	534	534	534	534	534	534	534	534
3	Ts	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6
4	T	583.8	583.8	583.8	583.8	583.8	583.8	583.8	583.8
	PR (est)	3.36		3.28		3.16		3.01	
5	Z(est)	0.727	0.738	0.727	0.736	0.728	0.733	0.731	0.730
6	TZ	424.5	430.8	424.6	429.5	425.2	427.7	426.5	426.0
7	GH/TZ	19.924	19.629	19.918	19.691	19.891	19.774	19.829	19.852
8	eS	2.111	2.088	2.110	2.093	2.108	2.099	2.104	2.105
9	1-e-S	0.526	0.521	0.526	0.522	0.526	0.524	0.525	0.525
10	Pt	2243.2	2243.2	2193.2	2193.2	2113.2	2113.2	2013.2	2013.2
11	Pt2 /1000	5031.9	5031.9	4810.1	4810.1	4465.6	4465.6	4053.0	4053.0
12	Fr	0.012892	0.012892	0.012892	0.012892	0.012892	0.012892	0.012892	0.0128924
13	Fc=FrTZ	5.472	5.555	5.474	5.537	5.481	5.514	5.498	5.492
14	FcQm	3.58	3.64	7.17	7.25	12.51	12.59	18.11	18.09
15	L/H(FcQm)	12.8	13.2	51.4	52.6	156.6	158.5	328.0	327.3
16	Fw	6.761363	6.896568	27.05758	27.47157	82.32401	82.97298	172.0865	171.83059
17	Pw2	5038.7	5038.8	4837.2	4837.6	4547.9	4548.6	4225.1	4224.8
18	Ps2	10636.7	10519.8	10208.7	10123.1	9588.7	9547.9	8887.4	8894.3
19	Ps	3261.4	3243.4	3195.1	3181.7	3096.6	3090.0	2981.2	2982.3
20	P	2752.3	2743.3	2694.2	2687.4	2604.9	2601.6	2497.2	2497.8
21	Pr	4.12	4.11	4.03	4.02	3.90	3.89	3.74	3.74
22	Tr	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
23	Z	0.738	0.738	0.736	0.735	0.733	0.732	0.730	0.730

FORM C122-D

Laboratory Services
1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Mewbourne Oil Co.
Attention: Mr. R.Jones
P. O. Box 5270
Hobbs, New Mexico 88240

SAMPLE IDENTIFICATION: Chalk Bluff #3
COMPANY: Mewebourne Oil Co.
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 3/4/93 12:30PM
ANALYSIS DATE: 03-05-93
PRESSURE - PSIG 530.0
SAMPLE TEMP. °F
ATMOS. TEMP. °F

GAS (XX) LIQUID ( )
SAMPLED BY: R. Jones
ANALYSIS BY: Rolland Perry

REMARKS:

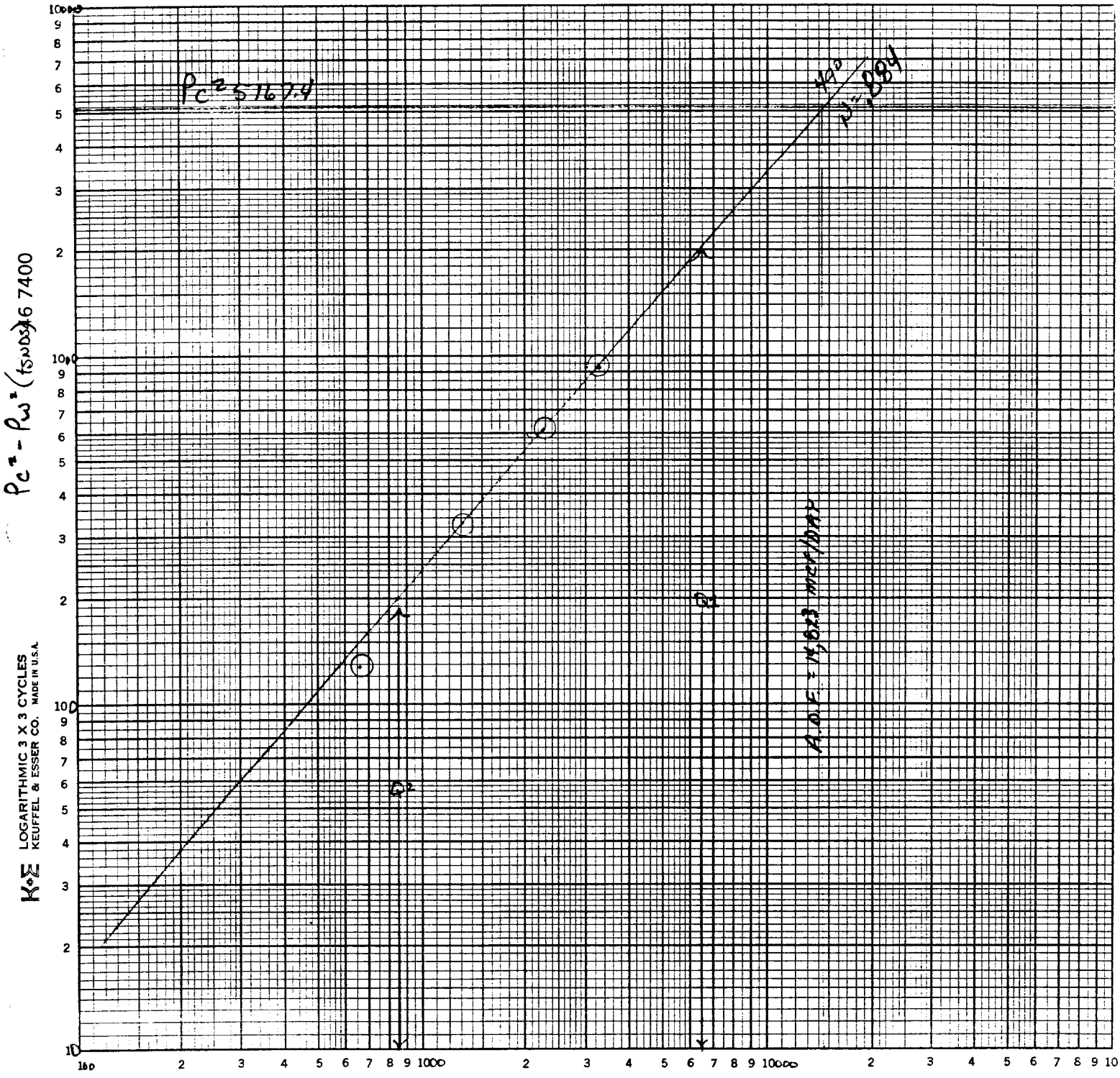
COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	0.33	
Carbon Dioxide	(CO2)	0.42	
Methane	(C1)	83.10	
Ethane	(C2)	8.14	2.164
Propane	(C3)	3.14	0.862
I-Butane	(IC4)	0.40	0.130
N-Butane	(NC4)	0.86	0.270
I-Pentane	(IC5)	0.39	0.140
N-Pentane	(NC5)	0.41	0.147
Hexane	(C6)	2.81	1.214
Heptanes Plus	(C7+)	0.00	0.000
		100.00	4.927

BTU/CU.FT. -	DRY	1269	MOLECULAR WT.	21.1701
AT 14.650	DRY	1265		
AT 14.650	WET	1239	26# GASOLINE -	1.591
AT 15.025	DRY	1298		
AT 15.025	WET	1304		

SPECIFIC GRAVITY -
CALCULATED 0.731
MEASURED

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



Log Q1 = 6500 : Log = 3.81291

Log Q2 = 850 : Log = 2.92942

Slope N = .88349 = .884

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

RECEIVED
APR 0 8 1993

OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: MEWBOURNE OIL COMPANY						Lease or Unit Name: CHALK BLUFF FEDERAL COM.		
Type Test: [X] Initial [ ] Annual [ ] Special						Test Date: 3/4/93	Well No.: 3	
Completion Date: 1/16/93	Total Depth: 10150			Plug Back TD: 10102		Elevation: GL 3628'	Unit Ltr. - Sec. - TWP - Rge.: I 1 18S 27E	
Csg. Size: 4½	Wt.: 10.5	d: 4.052	Set At: 8600 10150	Perforations: From: 9950 To: 9954			County: EDDY	
Tbg. Size: 2 7/8 2 3/8 &	Wt.: 4.7 & 6.5	d: 1.91 2.441	Set At: 9972	Perforations: From: 9957 To: 9972			Pool: MORROW NORTH ILLINOIS camp	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: subgke				Packer Set At: 9797			Formation: MORROW	
Producing Thru: tbg.	Reservoir Temp. °F: 133	Mean Annual Temp. °F: 60		Baro. Press - P_a: 13.2			Connection: Transwestern	
L: 9950	H: 9950	Gg: .731	% CO_2: .42	% N_2: .33	% H_2S:	Prover:	Meter Run: 3.068	Taps: flg.

FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2260		Pkr.		48 hr.
1.	3 X 1.500	530	5	148	2230		"		1 hr.
2.	3 X 1.500	530	19	124	2180		"		1 hr.
3.	3 X 1.500	535	52	88	2100		"		1 hr.
4.	3 X 1.500	540	102	70	2000		"		1 hr.
5.									

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F pv.	Rate of Flow Q, Mcfd
1.	11.13	52.12	543.2	.9248	1.170	1.043	655
2.	11.13	101.59	543.2	.9436	1.170	1.049	1310
3.	11.13	168.84	548.2	.9741	1.170	1.066	2283
4.	11.13	237.54	553.2	.9905	1.170	1.075	3294
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.81	608	1.52	.919
2.	.81	584	1.46	.909
3.	.82	548	1.37	.880
4.	.83	530	1.32	.865
5.				

Gas Liquid Hydrocarbon Ratio	23.63 Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons	57.0 Deg.	
Specific Gravity Separator Gas	.731	XXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	G Mix .849
Critical Pressure	668 P.S.I.A.	664 P.S.I.A.
Critical Temperature	401 R	441 R

P_c 2273.2 P_c^2 5167.4

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.	5031.9	2244.7	5038.8	128.6
2.	4810.1	2199.5	4837.6	329.8
3.	4465.6	2132.7	4548.6	618.9
4.	4053.9	2055.4	4224.8	942.6
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.4821$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4.500$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 14,823$

Absolute Open Flow 14,823 Mcfd @ 15.025 | Angle of Slope θ 49 | Slope, n .884

Remarks: 13.3 BBLS CONDENSATE PRODUCED DURING TEST

Approved By Division	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTERS	KS	KS

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
NM 0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

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

8. Well Name and No.
Chalk Bluff Fed. ~~Comm.~~ #3

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-015-27163

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

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & 990' FEL of Section 1, T18S, R27E

11. County or Parish, State
Eddy

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

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

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

Add Morrow perforations 9860' to 9870'.

APR 1999 RECEIVED OCD - ARTESIA

ACCEPTED FOR RECORD
APR 27 1999

(ORIG. SGD.) GARY GOURLEY

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

Signed Jeffery Edwards Title District Manager Date 04/15/99

(This space for Federal or State office use)

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

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

*See Instruction on Reverse Side

30-015-27163

Oxford®

ESSELTE

MADE IN U.S.A. NO. R753 1/3

1-21-93

Spectral Density
Dual Spaced Neutron
6365'- 8467'
400'- 10,100'

Comp. Sonic Log.
6365'- 8467'

Dual Induction Laterolog
6365'- 8501'

Dual Lat.
6365'- 8467'
8968'- 10,143'

MSG Gamma Collar
CBL Log
1340'- 10,069'

NSL- R-9760

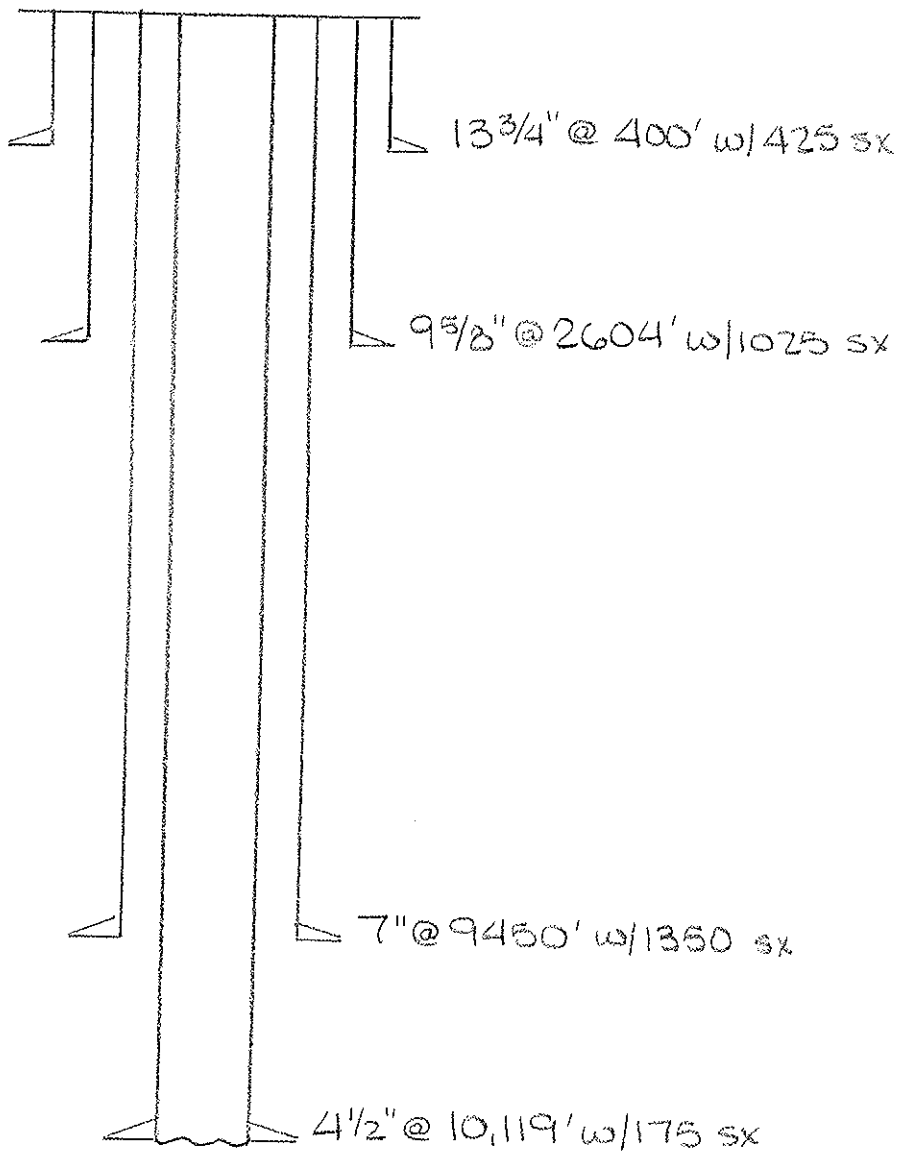
R-9760
SD + NSL
11-4-92

SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 83
Artificial Penetration Review

OPERATOR	Navajo Refining Co.	**STATUS**	Active SWD
LEASE	WDW	**LOCATION**	Sec. 6 -T18S-R27E
WELL NUMBER	3	**MUD FILLED BOREHOLE**	NA
DRILLED	12-22-90	**TOP OF INJECTION ZONE**	7319'
PLUGGED	NA	**API NO.**	30-015- 26575

REMARKS: Calc. Top of Cement behind 7" @ 3841'

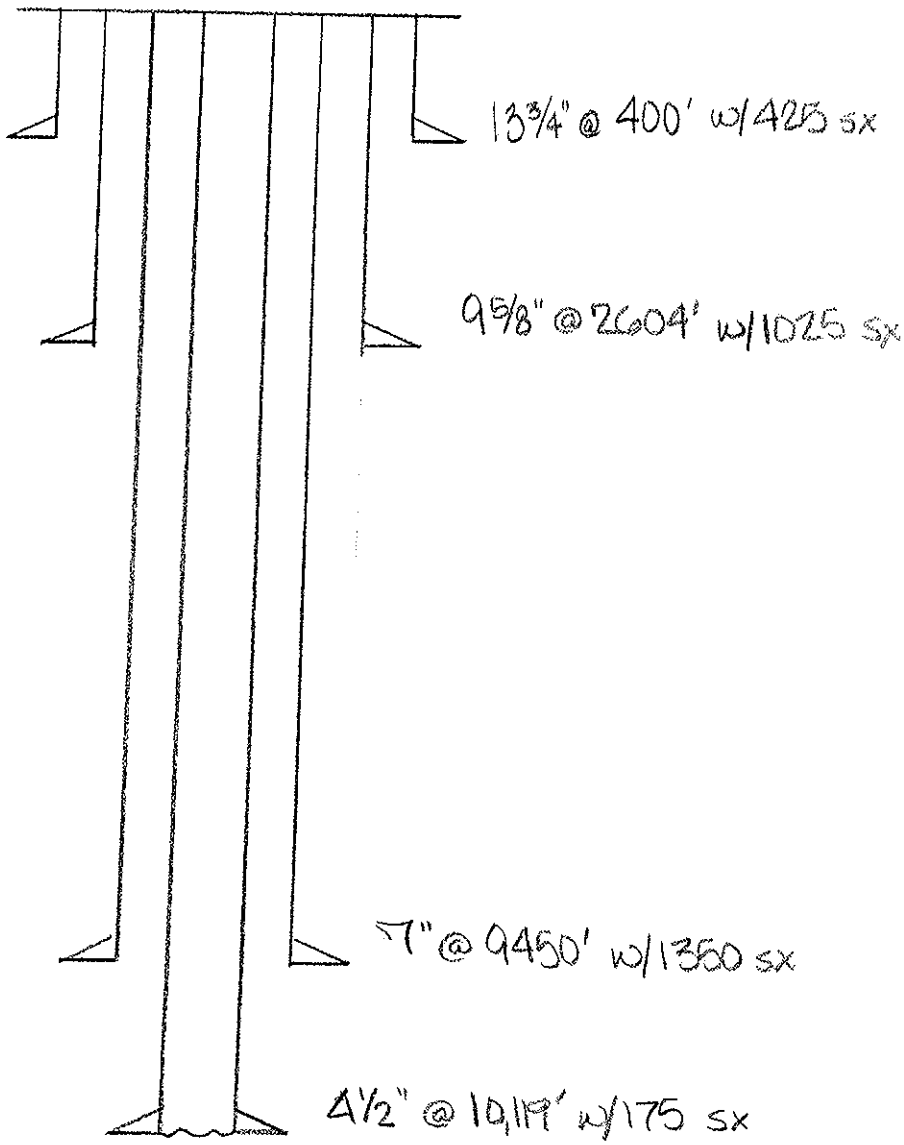


SUBSURFACE

NAVAJO REFINING COMPANY, L.L.C.
Map ID No. 96
Artificial Penetration Review

OPERATOR	Navajo Refining Co.	**STATUS**	Active
LEASE	WDW	**LOCATION**	Sec. 6 -T18S-R27E
WELL NUMBER	3	**MUD FILLED BOREHOLE**	—
DRILLED	N/A	**TOP INJECTION ZONE**	-3694'
PLUGGED	N/A	**API NO.**	30-015-26575

REMARKS:



MAP ID NO. 96

NAVAJO REFINING COMPANY
WASTE DISPOSAL WELL NO. 3

API NO. 30-015-26575

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
Chalk Bluff Federal Comm #1

9. API Well No.
30-015-26575

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

11. County or Parish, State
Eddy, NM

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

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

2. Name of Operator
Mewbourne Oil Com[any

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
790' FSL & 2250' FWL, Sec.1 T-18S R-27E

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

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

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

The above caption well was successfully MIT'ed on 10/25/2000. (500 psi for 30 min.)
The pressure chart is enclosed.
If any question, please call.

ACCEPTED FOR RECORD
NOV 15 2000
43
BLM

RECEIVED
OCD - ARTESIA

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

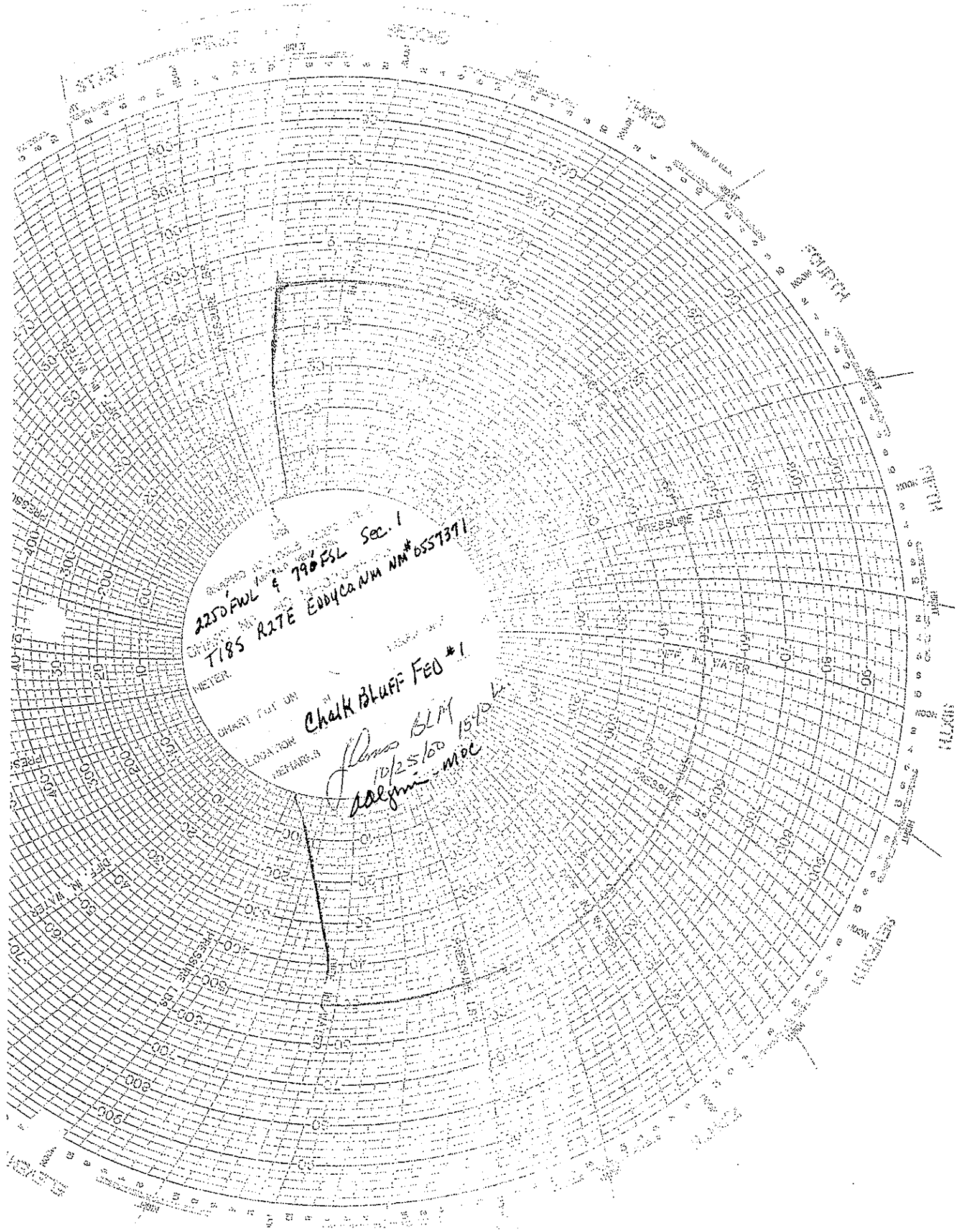
Signed [signature] Title N.M. Young District Manager Date 11/01/00

(This space for Federal or State office use)

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

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

*See Instruction on Reverse Side


2250 FWL & 790 FSL Sec. 1
T18S R27E Eddy Co NM NM# 0557371
METER
CHART PUT ON
Chalk Bluff FED #1
LOCATION
REMARKS
PRESSURE LBS
OFF IN WATER
NOON

C15F

RECEIVED

JUN 20 1991

O. C. D.
ARTESIA, OFFICE

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

RECEIVED
MAY 24 1991
DIST. 6 N.M.
Carlsbad, New Mexico

SUBMIT IN TRIPLICATE

1. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P. O. Box 7698, Tyler, Texas 75711
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2250' FWL & 790' FSL of Sec. 1, T18S-R27E
5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
8. Well Name and No.: CHALK BLUFF FED. COM #1
9. API Well No.: 30-015-26575
10. Field and Pool, or Exploratory Area: No. Illinois Camp Morrow
11. County or Parish, State: Eddy, New Mexico

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

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

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

4/24/91 - Western fracture treated Morrow Sand perfs 9936-46', 9964'67' down tubing with 16,000 gals 73 downhole slurry quality Binary Westfoam carrying 16,000# 20/40 mesh ACFRAC Black Westprop-3. Screened out with 545 gals CO_2/N_2 2% KCL water. Screened out at 10,100# with 1200 gals of 3# stage in formation and 545 gals flush in tubing. Pumped 116 sxs Proppant into formation and left 25 sacks in casing and 19 sacks in tubing. ISDP 8300#, 5 mins 7600#, 10 mins 7200#, 15 mins 6800#. Avg 10.0 BPM at 8200#. Job complete 10:20 AM.

ACCEPTED FOR RECORD
JUN 14 1991
SJS
CARLSBAD, NEW MEXICO

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

Signed Clayton Thompson Title Engr. Oprns. Secretary Date 5/21/91

(This space for Federal or State office use)

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

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

*See Instruction on Reverse Side

NM OIL CONS COMMISSION
Drawer DD
Artesia, NM 88210

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

FEB 21 1994

1. Type of Well: ☐ Oil Well ■ Gas Well ☐ Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2250' FWL & 790' FSL Sec. 1-T18S-R27E
5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
8. Well Name and No.: Chalk Bluff Fed. Com. #1
9. API Well No.: 30-015-26575
10. Field and Pool, or Exploratory Area: N. Illinois Camp
11. County or Parish, State: Eddy Co., N.M.

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

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

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

Mewbourne Oil Company here by requests temporarily abandon status pending further evaluation of the lease for the above well. The well was spudded 12/22/90.

APPROVED FOR 12 MONTH PERIOD
ENDING 1/25/95

14. I hereby certify that the foregoing is true and correct
Signed Robert G. Jones Title Petroleum Engineer Date 01/25/94

(This space for Federal or State office use)
Approved by (ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 2/16/94
Conditions of approval, if any:

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

*See Instruction on Reverse Side

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

dsf

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

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

NOV 17 1993

O. C. D.

8. Well Name and No.
Chalk Bluff Fed. Comm. #1

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-015-26575

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

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2250' FWL & 790' FSL of Sec. 1-T18S-R27E

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

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

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

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

* Verbal from Adam Salameh

9/10/93 Abandon Morrow formation. Set CIBP @ 9800' & cover w/35' cement.
9/11/93 Perforate Cisco from 7826'-7830'. Test & evaluate.
9/12/93 Squeeze Cisco from 7826'-7830' w/600 sx. Class "C".
9/15/93 Drill out squeeze perfs. to 7792'. Squeeze held 2,000#.
9/16/93 Perforate Cisco from 7676'-7678'. Test and evaluate.
9/17/93 Abandon Cisco formation, set CIBP @ 7600' & cover w/35' cement.
9/18/93 Perforate Wolfcamp 7304'-7314'. Test & evaluate.
9/19/93 Acidize Wolfcamp w/1500 gal. 15% NE-FE from 7304'-7314'.
9/21/93 Set CIBP @ 7294' & perforate Wolfcamp from 7262'-7278'. Test & evaluate.
9/22/93 Acidize Wolfcamp w/2000 gal. 15% NE-FE from 7262'-7278'.
9/23/93 Set CIBP @ 7208' & perforate Wolfcamp from 7050'-7102'. Test & evaluate.
9/24/93 Acidize Wolfcamp w/2000 gal. 15% NE-FE from 7050'-7102'.
9/25/93 Set CIBP @ 7010'.

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

Signed Robert G. Jones Title Petroleum Engineer Date 10/05/93

(This space for Federal or State office use)

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

ACCEPTED FOR RECORD
NOV 15 1993
CARLSBAD, NEW MEXICO

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

*See Instructions on Reverse Side

C/SF

3160-5
1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

RECEIVED
OCT 19 1993
O. C. D.

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

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

8. Well Name and No.
Chalk Bluff Fed. Com. #1

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-015-26575

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

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2250' FWL & 790' FSL of Sec. 1-T18S-R27E

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

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

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

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

09/08/93 Abandon Morrow Perfs 9861' - 9967'

- Set CIBP @ 9800' - cover w/35' cement.
- Recomplete in Cisco Formation - Test & evaluate.
- If unecomomical recomplete in Wolfcamp - Test & evaluate.

RECEIVED
SEP 22 10 43 AM '93
CARL
AREA

14. I hereby certify that the foregoing is true and correct
Signed K. G. Jones Title Petroleum Engineer Date 09/07/93

(This space for Federal or State office use)
Approved by (ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 10/15/93
Conditions of approval, if any:

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*See Instruction on Reverse Side

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
SEP 28 1992
O. C. D.
ARTESIA, NM

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
1. Type of Well: ☐ Oil Well ■ Gas Well ☐ Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P. O. Box 7698, Tyler, Texas 75711 (903) 561-2900
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2250' FWL & 790' FSL Sec. 1, T18S-R27E
8. Well Name and No.: Chalk Bluff Fed.Com.#1
9. API Well No.: 30-015-26575
10. Field and Pool, or Exploratory Area: N.Illinois Camp-Mor.-Gas
11. County or Parish, State: Eddy

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

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

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

8/13/92 - Perf Middle Morrow 9861-9882', 2 SPF, 10' Net, 22 holes.

8/14/92 - Acidized w/3500 gals 7½% HCL + additives + 1000 SCF/bbl nitrogen carrying 80 ball sealers. Flushed w/2% KCL wtr + 1000 SCF/bbl nitrogen. ISDP 4300#, 5 mins 3800#, 10 mins 3400#, 15 mins 2800#. Avg rate 3.7 BPM, AP 5000#, MP 5600#. Blew well down to pit 8/15 - 8/18/92.

8/19/92 - MI swab unit. Pressure tested tbg to 2000#.Held OK. Removed tree. RU BOP. RU swab. Swabbed well down to 5300'.

8/20/92 - Swabbed down to 6500'. POOH w/tbg & pkr. TIH w/new pkr assembly & 200 jts tbg. Tested tbg to 8000#. 8/21/92 - Continued testing tbg. Set pkr @ 9740.68' w/15 pts compression. Press annulus to 2000#. Held OK. Started swabbing. Had light blow of gas.

8/22/92 - RU Western Co. Acidized perfs w/1500 gals 7½% HCL acid + additives + 1000 scf/bbl nitrogen + 35 ball sealers. Flushed w/2% KCL wtr. ISDP 400#. 5 min 3700#, 10 min 3700#, 15 min 3600#. ATP 5100#, MTP 5400#. RD Western. Opened well to pit on 12/64" choke. No show of gas or oil. Recovering load.

8/23/92 - RU swab. FL @ 7000'. Swabbed dry in 3 runs. Continued swabbing. Recovering load.

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

Signed: [signature] Title: Engr. Oprns. Secretary Date: 9/11/92

(This space for Federal or State office use)

Approved by: Title: Date:

Conditions of approval, if any:

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

*See Instruction on Reverse Side

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
MAY 5 7 46 AM '91

Type Test: [X] Initial [ ] Annual [ ] Special		Test Date: 03/15/91	
Company: Mewbourne Oil Company	Connection: Transwestern	RECEIVED	
Pool: Undesignated North Illinois Camp Morrow	Formation: Morrow	MAY - 7 1991	Unit: N
Completion Date: 03/05/91	Total Depth: 10,120'	Plug Back TD: 10,075'	O.C.D. ARTESIA, OFFICE 3609'
Farm or Lease Name: Chalk Bluff Federal			
Cag. Size: 4 1/2" 5 1/2"	Wt.: 11.6#	d:	Set At: 10,120'
Perforations: From 9936' To 9967'			Well No.: 1
Tbg. Size: 2 7/8"	Wt.: 6.5	d:	Set At: 9,805'
Perforations: From Open To End			Unit: N Sec.: 1 Twp.: 18S Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single Gas		Packer Set At: 9805'	County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 148 @ 10,120	Mean Annual Temp. °F: 72	Baro. Press. – P_a: 13.2
State: New Mexico			

L	H	Cg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9949	9949	.660	.43	.42	----		3.068	Flg.

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI	S.I.				2380				72 Hr.
1.	3 X 1.125	426.8	4	51	2175		Pkr.		1 Hr.
2.	3 x 1.125	446.8	11	51	2070		Pkr.		1 Hr.
3.	3 x 1.125	446.8	32	51	1900		Pkr.		1 Hr.
4.	3 x 1.125	426.8	72	45	1605		Pkr.		1 Hr.
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	6.217	41.952	440	1.009	1.225	1.048	337
2.	6.217	71.134	460	1.009	1.225	1.051	574
3	6.217	121.326	460	1.009	1.225	1.051	980
4.	6.217	177.989	440	1.015	1.225	1.051	1446
5							

NO.	P_t	Temp. °R	T_r	Z
1	.65	511	1.37	.910
2.	.68	511	1.37	.906
3.	.68	511	1.37	.906
4.	.65	505	1.35	.905
5				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: _____ Deg.
Specific Gravity Separator Gas: .660 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 673 P.S.I.A. _____ P.S.I.A.
Critical Temperature: 374 R _____ R

P_c 2472 P_c^2 6110.7

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2264	5125	985.7
2		2147	4609	1501.7
3		1966	3865	2245.7
4		1639	2686	3424.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.784$

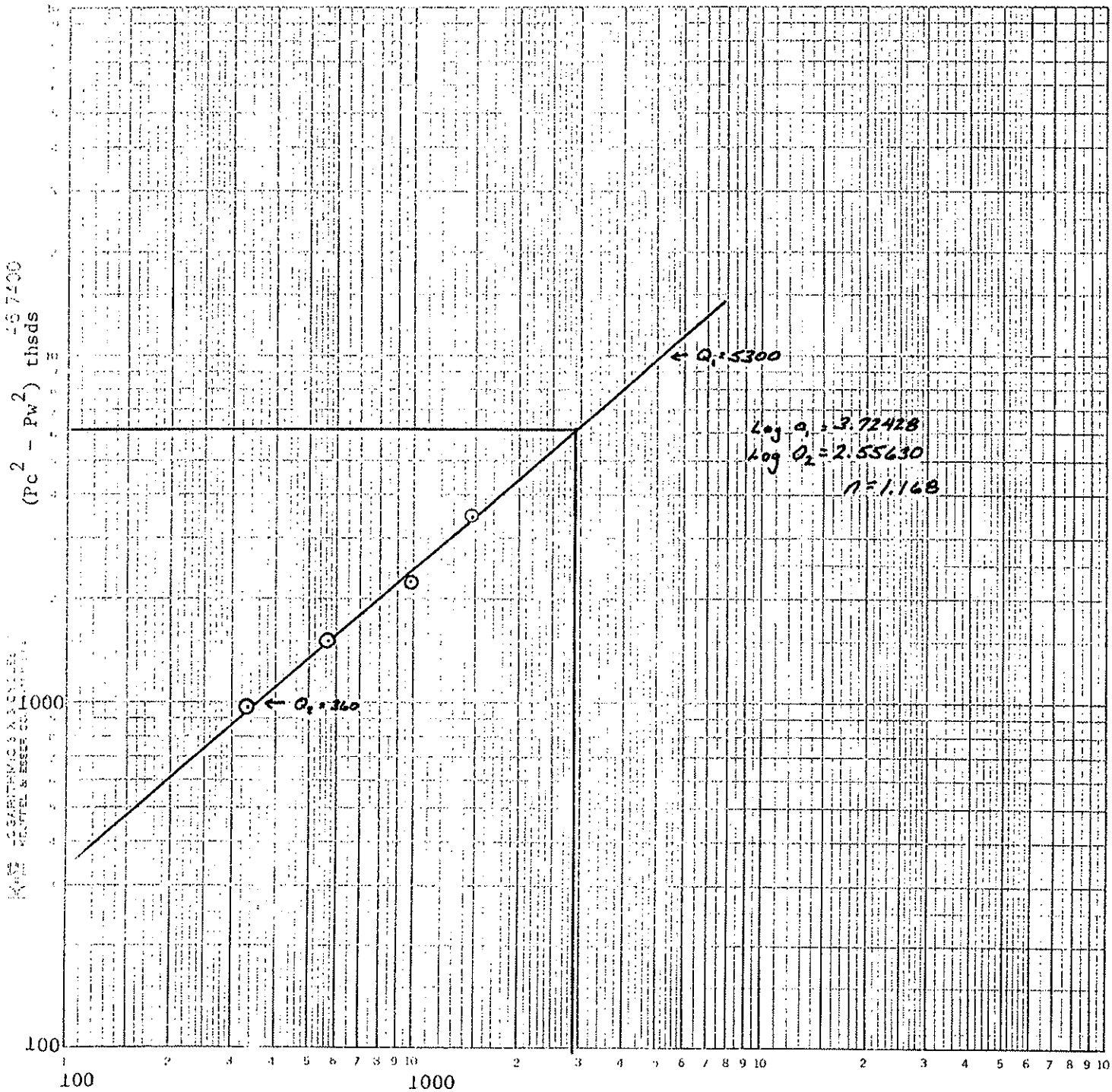
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.967$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.844$

Absolute Open Flow: 2,844 Mcfd @ 15.025 | Angle of Slope θ: 41° | Slope, n: 1.168

Remarks: Well made 0 bbl. fluid during test

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Greg Milner	Greg Milner	Bill Pierce



Q MCF/D

AOF = 2.9 MMCF/D

Laboratory Services

1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Mewbourne Oil Co.
Attention: Mr, Greg Milner
P. O. Box 5270
Hobbs, New Mexico 88241

SAMPLE IDENTIFICATION: Chalk Bluff Federal #1
COMPANY: Mewbourne Oil Co.
LEASE:
PLANT:

SAMPLE DATA:

DATE SAMPLED:	03-15-91
ANALYSIS DATE:	03-18-91
PRESSURE - PSIG	460.00
SAMPLE TEMP. °F	51.00
ATMOS. TEMP. °F	

GAS (XX) LIQUID ( )
SAMPLED BY: Gregory Milner
ANALYSIS BY: Rolland Perry

REMARKS:

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Oxygen	(O2)		
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	0.42	
Carbon Dioxide	(CO2)	0.43	
Methane	(C1)	87.54	
Ethane	(C2)	7.07	1.886
Propane	(C3)	2.38	0.654
I-Butane	(IC4)	0.31	0.100
N-Butane	(NC4)	0.54	0.169
I-Pentane	(IC5)	0.20	0.071
N-Pentane	(NC5)	0.14	0.052
Hexane	(C6)	0.97	0.399
Heptanes Plus	(C7+)	0.00	0.000
		100.00	3.331

BTU/CU.FT. - DRY	1156	MOLECULAR WT	19.0972
AT 14.650 DRY	1153		
AT 14.650 WET	1133	26# GASOLINE -	0.578
AT 15.025 DRY	1182		
AT 15.025 WET	1162		

SPECIFIC GRAVITY -	
CALCULATED	0.660
MEASURED	0.000

WORK SHEET FOR CALCULATION OF WEL. AD PRESSURES (P_c or [illegible]).

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or [illegible])

Form C-122F
Adopted 9-1-65

COMPANY Mewbourne Oil LEASE Chalk Bluff Fed. WELL NO. 1 DATE 3-18-91

LOCATION: Unit _____ Section 1 Township 18S Range 27E

9949 H 9949 L/H 1.000 G .660 % CO_2 .43 % N_2 .42 % H_2S —

GH 6566 P_{cr} 673 (TABLE IX & X) T_{cr} 374 (TABLE IX & X)

LINE		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	532	532						
2	T_s(B.H. °R)	608	608						
3	$T=(\frac{T_w + T_s}{2})$	570	570						
4	Z (Est.)	.800	.790						
5	TZ	456.0	450.4						
6	GH/TZ	14.399	14.578						
7	e^s(Table XIV)	1.716	1.727						
8	P_f or [illegible]	3249	3249						
9	P_f^2 or [illegible]	10556	10556						
10	$P_c^2 = P_f^2/e^s$ or [illegible]	6151.7	6110.6						
11	P_c or [illegible]	2480.3	$\boxed{2472.0}$	$= P_c$					
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	2864.6	2860.5						
13	$P_r = (P/P_{cr})$	4.26	4.25						
14	$T_r = (T/T_{cr})$	1.52	1.52						
15	Z (Table XI)	.790	.790						

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

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES ([illegible] or P_w)

FROM KNOWN BOTTOM HOLE PRESSURE ([illegible] or P_s)

Form C-1221
Adopted 9-1-65

COMPANY Mewbourne LEASE Chalk Bluff Fed. WELL NO. 1 DATE 3-18-91

LOCATION: Unit _____ Section 1 Township 18S Range 27E

L 9949 H 9949 L/H 1.00 G .660 % CO_2 .43 % N_2 .42 % H_2S —

GH 6566 P_{cr} 673 (TABLE IX & X) T_{cr} 374 (TABLE IX & X)

LINE		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	532	532	532	532	532	532	532	532
2	T_s(B.H. °R)	608	608	608	608	608	608	608	608
3	$T=(\frac{T_w + T_s}{2})$	570	570	570	570	570	570	570	570
4	Z (Est.)	.835	.783	.783	.781	.781	.780	.780	.792
5	TZ	476.0	446.5	446.5	445.1	445.2	444.8	444.6	451.7
6	GH/TZ	13.796	14.704	14.712	14.753	14.749	14.761	14.768	14.537
7	e^s(Table XIV)	1.678	1.736	1.736	1.739	1.739	1.739	1.740	1.725
8	[illegible] or P_s	2983	2983	2831	2831	2593	2593	2152	2152
9	[illegible] or P_s^2	8898.3	8898.3	8014.6	8014.6	6723.6	6723.6	4631.1	4631.1
10	[illegible] $= P_f^2/e^s$ or $P_w^2 = P_s^2/e^s$	5304.3	5126.6	4616.2	4609.0	3867.2	3865.5	2661.7	2684.9
11	[illegible] or P_w	2303.1	2264.2	2148.5	2146.9	1966.5	1966.1	1631.5	1638.6
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	2643.1	2623.6	2489.8	2488.9	2279.8	2279.5	1891.7	1895.3
13	$P_r = (P/P_{cr})$	3.93	3.90	3.70	3.70	3.39	3.39	2.81	2.82
14	$T_r = (T/T_{cr})$	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
15	Z (Table XI)	.783	.783	.781	.781	.780	.780	.792	.792

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

COMPANY: PRO WIRELINE

CLIENT: MEWBOURNE OIL

GAUGE NUMBER: 12235

WELL NAME: CHALK BLUFF

WELL NUMBER: 1

TEST NUMBER: 1

LOCATION:

TEST OPERATOR: BURRELL

COMMENTS: 4 POINT FLOW TEST RAN
AFTER 72 HOUR BUILD-UP

POSITION	GAUGE SERIAL NUMBER
1	
2	
3	
4	

AGE START DATE: 3/15/91 GAUGE S/N: 12235

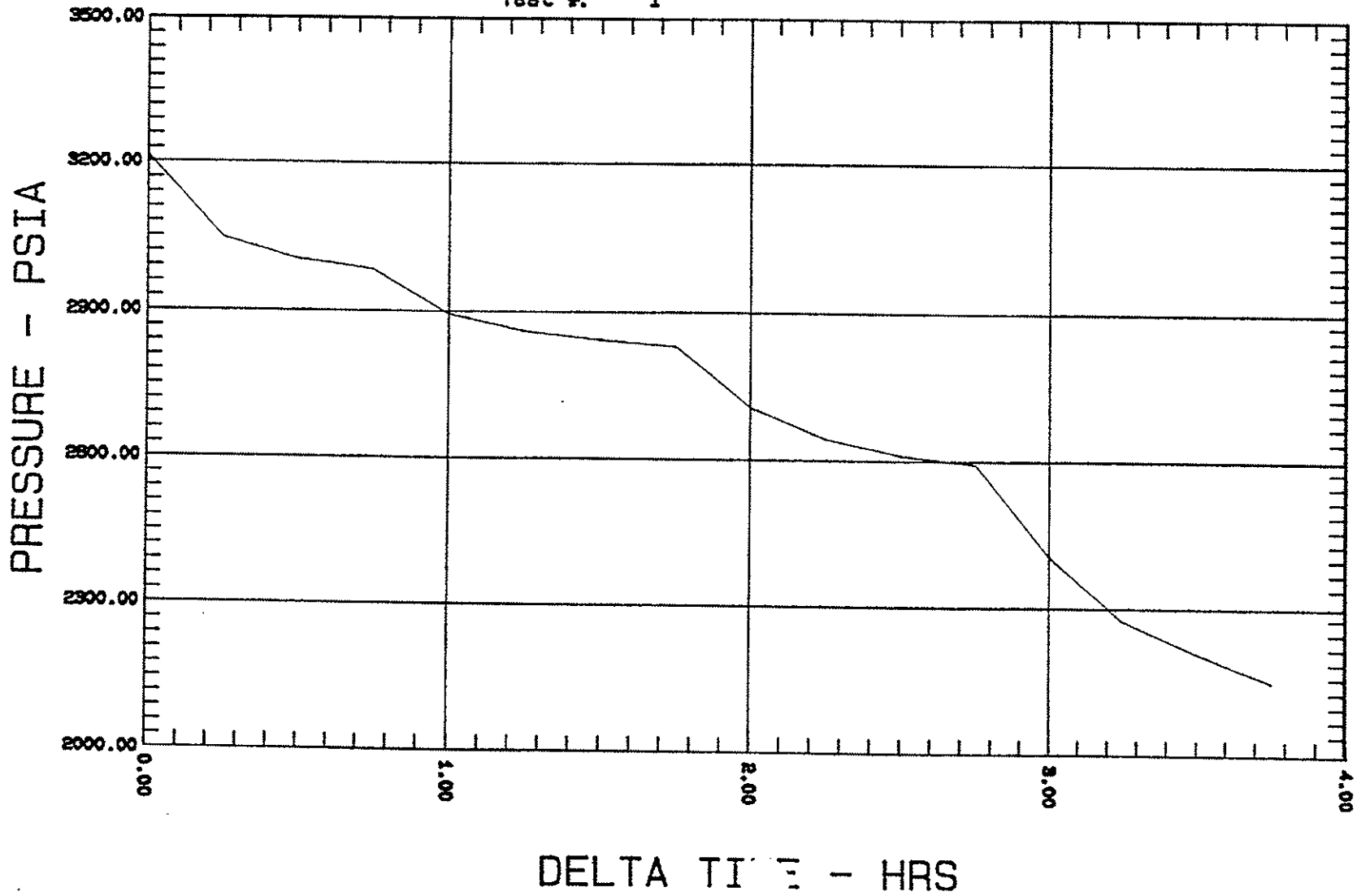
DATA FILE: 3

REAL TIME	DELTA TIME HRS	PRESSURE PSIA	TEMPERATURE 'F	COMMENTS
9:45: 0	0.0000	3213.00		START RATE 1
10: 0: 0	0.2500	3046.00		
10:15: 0	0.5000	3003.00		
10:30: 0	0.7500	2983.00		START RATE 2
10:45: 0	1.0000	2894.00		
11: 0: 0	1.2500	2861.00		
11:15: 0	1.5000	2843.00		
11:30: 0	1.7500	2831.00		START RATE 3
11:45: 0	2.0000	2707.00		
12: 0: 0	2.2500	2643.00		
12:15: 0	2.5000	2610.00		
12:30: 0	2.7500	2593.00		START RATE 4
12:45: 0	3.0000	2405.00		
13: 0: 0	3.2500	2276.00		
13:15: 0	3.5000	2210.00		
13:30: 0	3.7500	2152.00		END OF TEST

Plot starting date: 3/15/91
time: 9:45: 0
Gauge S/N

Company: PRO WIRELINE
Client: MEWBOURNE OIL
Well name: CHALK BLUFF
Well #: 1
Test #: 1

Location:
Operator: BURRELL
Comments: 4 POINT FLOW TEST RAN
AFTER 72 HOUR BUILD UP



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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

CONFIDENTIAL
RECEIVED
JUL 23 1992
O. C. D.
ARTESIA, OFFICE

2. NAME OF OPERATOR: Mewbourne Oil Company

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements): At surface 2250' FWL & 790' FSL

At top prod. interval reported below

At total depth Same

5. LEASE DESIGNATION AND SERIAL NO.: NM-0557371

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME: Chalk Bluff Federal Com

9. WELL NO.: 1

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

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 1-T18S-R27

14. PERMIT NO. / DATE ISSUED: API #30-015-26575

12. COUNTY OR PARISH: Eddy

13. STATE: N.M.

15. DATE SPUDDED: 12/22/90

16. DATE T.D. REACHED: 1/29/91

17. DATE COMPL. (Ready to prod.): 3/07/91

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: KB 3625', GM 3609'

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD: 10,120'

21. PLUG, BACK T.D., MD & TVD: 10,079'

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY: → ROTARY TOOLS: X CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 9936-46', 9964-67' - Morrow

25. WAS DIRECTIONAL SURVEY MADE: Yes

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

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.50#	400'	17-1/2"	425 - Circ	None
9-5/8"	36#	2604'	12-1/4"	1025 - Circ	None
7"	26# & 29#	9450'	8-3/4"	1350 - Circ	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
4-1/2"	9051'	10119'	175	

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	9805'	9805'

31. PERFORATION RECORD (Interval, size and number)
9936-46', 9964-67'
13', 2 SPF, Total 28

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
9936-67'	3000 gals Mod-101 acid + 1000 SCF/bbl N2 + 50 ball sealers. Flushed w/35 bbls 2% KCL water + 1000 SCF/bbl N2.

33.* PRODUCTION

DATE FIRST PRODUCTION: | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): Flowing | WELL STATUS (Producing or shut-in): Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3/11/91	24 hrs	8/64"	→	1	886	0	886:1

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
1600#		→	1	886	0	58

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

TEST WITNESSED BY: W. H. CLOVEY

35. LIST OF ATTACHMENTS: Logs

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

SIGNED Raylene Thompson TITLE Engr. Oprns. Secretary DATE 3/18/91

ACCEPTED FOR RECORD
SDS
APR 1 1991
CARLSBAD, NEW MEXICO

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

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

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Lower Morrow	9936'	9967'	Sandstone
Middle Morrow	9861'	9881'	Sandstone

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Yates	424'	
Queen	1138'	
Grayburg	1484'	
San Andres	1976'	
Glorietta	3458'	
Tubb	4451'	
Drinkard	5376'	
Abo	5794'	
Wolfcamp	6420'	
Cisco	7666'	
Canyon	8368'	
Strawn	8844'	
Morrow	9454'	
Morrow Clastics	9770'	
Barnett	10016'	

KEN REYNOLDS—PRESIDENT
ARNIE NEWKIRK—VICE-PRESIDENT

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

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

February 05,1991

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

REF: Chalk Bluff Fed Comm #1

Gentlemen:

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

400' - 1/4°	4674' - 1 1/4°	6559' - 2 1/2°
905' - 3/4°	5120' - 1 1/2°	6650' - 2 1/4°
1303' - 3/4°	5639' - 1 1/4°	7146' - 1 3/4°
1901' - 1 1/4°	6077' - 3 1/2°	7672' - 3/4°
2399' - 1 3/4°	6126' - 3 3/4°	7800' - 3/4°
2600' - 1 3/4°	6189' - 3 3/4°	8291' - 1°
3098' - 1 1/2°	6250' - 3 3/4°	8815' - 1°
3592' - 1 1/2°	6312' - 3 1/2°	9313' - 3/4°
3682' - 3/4°	6374' - 3 1/4°	9808' - 1 1/4°
4177' - 1°	6467' - 2 3/4°	10,120' 3/4° TD

Sincerely,

Arnold Newkirk

Arnold Newkirk
Vice-President

STATE OF NEW MEXICO)
)
COUNTY OF CHAVES)

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

MY COMMISSION EXPIRES

October 07,1992

Linda Rogers

NOTARY PUBLIC

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
MAY 5 7 46 AM '91
OCD
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special		Test Date: 03/15/91	
Company: Mewbourne Oil Company	Connection: Transwestern	RECEIVED MAY - 7 1991	Unit: CARLSBAD AREA
Pool: Undesignated North Illinois Camp Morrow	Formation: Morrow		
Completion Date: 03/05/91	Total Depth: 10,120'	Plug Back TD: 10,075'	Elev. 3609'
Farm or Lease Name: Chalk Bluff Federal			
Csg. Size: 4 1/2" / 5 1/2"	Wt.: 11.6#	d:	Set At: 10,120'
Perforations: From 9936' To 9967'			Well No.: 1
Tbg. Size: 2 7/8"	Wt.: 6.5	d:	Set At: 9,805'
Perforations: From Open To End			Unit: N Sec.: 1 Twp.: 18S Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single Gas		Packer Set At: 9805'	County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 148 @ 10,120	Mean Annual Temp. °F: 72	Baro. Press. – P_a: 13.2
State: New Mexico			

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
9949	9949	.660	.43	.42	----		3.068	Flg.

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	S.I.				2380				72 Hr.
1.	3 X 1.125	426.8	4	51	2175		Pkr.		1 Hr.
2.	3 x 1.125	446.8	11	51	2070		Pkr.		1 Hr.
3.	3 x 1.125	446.8	32	51	1900		Pkr.		1 Hr.
4.	3 x 1.125	426.8	72	45	1605		Pkr.		1 Hr.
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	6.217	41.952	440	1.009	1.225	1.048	337
2.	6.217	71.134	460	1.009	1.225	1.051	574
3	6.217	121.326	460	1.009	1.225	1.051	980
4.	6.217	177.989	440	1.015	1.225	1.051	1446
5							

NO.	P_t	Temp. °R	T_r	Z
1	.65	511	1.37	.910
2.	.68	511	1.37	.906
3.	.68	511	1.37	.906
4.	.65	505	1.35	.905
5				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: _____ Deg.
Specific Gravity Separator Gas: .660 | XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 673 P.S.I.A. | _____ P.S.I.A.
Critical Temperature: 374 R | _____ R

P_c 2472 P_c^2 6110.7

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2264	5125	985.7
2		2147	4609	1501.7
3		1966	3865	2245.7
4		1639	2686	3424.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.784$

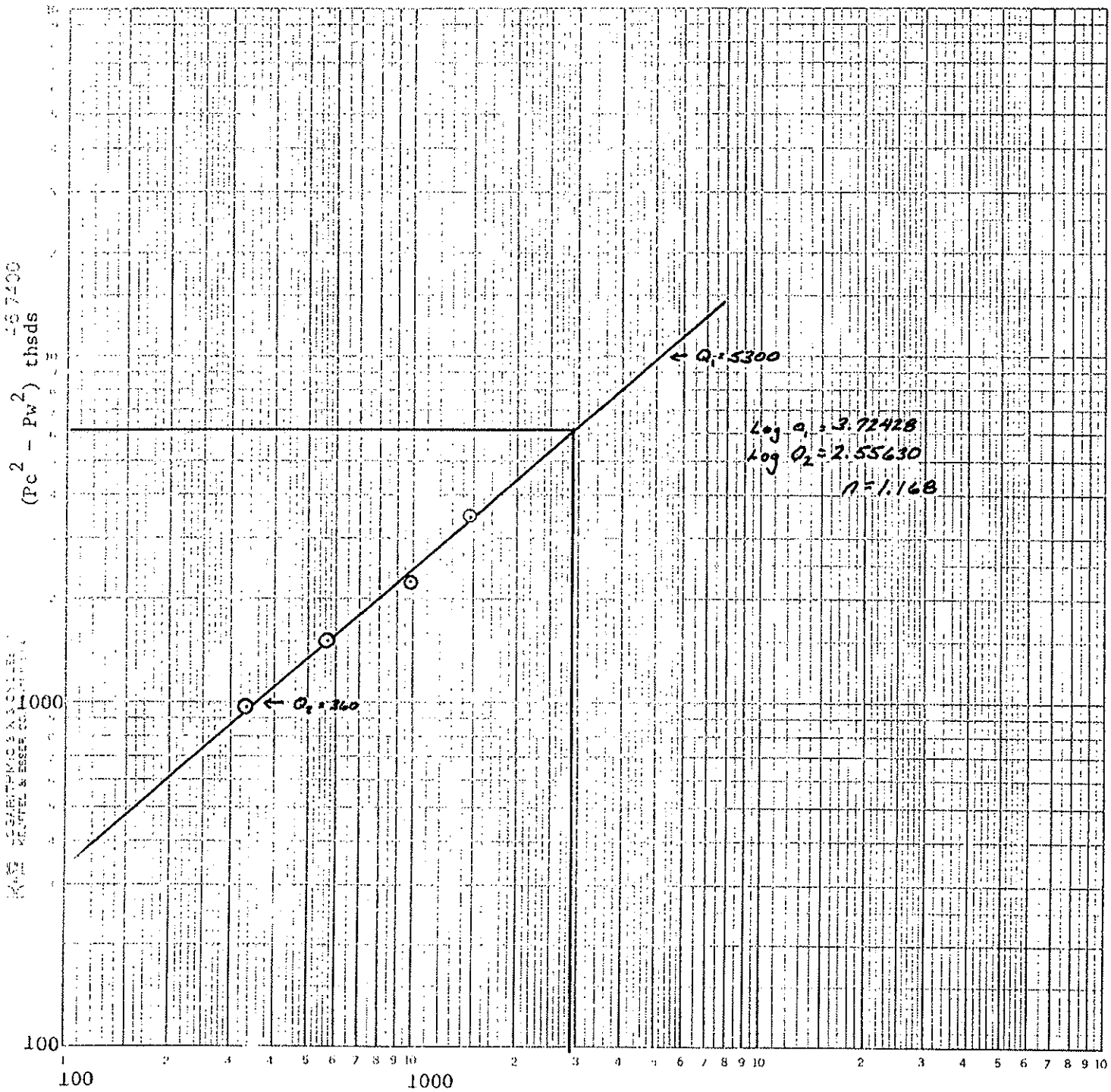
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.967$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.844$

Absolute Open Flow: 2,844 Mcfd @ 15.025 | Angle of Slope θ: 41° | Slope, n: 1.168

Remarks: Well made 0 bbl. fluid during test

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Greg Milner	Greg Milner	Bill Pierce


$(Pc^2 - Pw^2)$ thsds
1000
100
100
1000
Q MCF/D
← Q_1 = 5300
← Q_2 = 360
Log a_1 = 3.72428
Log Q_2 = 2.55630
n = 1.168

AOF = 2.9 MMCF/D

Laboratory Services

1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR:	Mewbourne Oil Co. Attention: Mr, Greg Milner P. O. Box 5270 Hobbs, New Mexico 88241	SAMPLE IDENTIFICATION:	Chalk Bluff Federal #1
		COMPANY:	Mewbourne Oil Co.
		LEASE:	
		PLANT:	

SAMPLE DATA:	DATE SAMPLED:	03-15-91	GAS (XX)	LIQUID ( )
	ANALYSIS DATE:	03-18-91	SAMPLED BY:	Gregory Milner
	PRESSURE - PSIG	460.00	ANALYSIS BY:	Rolland Perry
	SAMPLE TEMP. °F	51.00		
	ATMOS. TEMP. °F			

REMARKS:

COMPONENT ANALYSIS

COMPONENT		MOL PERCENT	GPM
Oxygen	(O2)		
Hydrogen Sulfide	(H2S)		
Nitrogen	(N2)	0.42	
Carbon Dioxide	(CO2)	0.43	
Methane	(C1)	87.54	
Ethane	(C2)	7.07	1.886
Propane	(C3)	2.38	0.654
I-Butane	(IC4)	0.31	0.100
N-Butane	(NC4)	0.54	0.169
I-Pentane	(IC5)	0.20	0.071
N-Pentane	(NC5)	0.14	0.052
Hexane	(C6)	0.97	0.399
Heptanes Plus	(C7+)	0.00	0.000
		100.00	3.331

BTU/CU.FT. - DRY	1156	MOLECULAR WT	19.0972
AT 14.650 DRY	1153		
AT 14.650 WET	1133	26# GASOLINE -	0.578
AT 15.025 DRY	1182		
AT 15.025 WET	1162		
SPECIFIC GRAVITY -			
CALCULATED	0.660		
MEASURED	0.000		

WORK SHEET FOR CALCULATION OF WELL HEAD PRESSURES (P_c or [illegible])

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or [illegible])

Form C-122F
Adopted 9-1-65

COMPANY Mewbourne Oil LEASE Chalk Bluff Fed. WELL NO. 1 DATE 3-18-91

LOCATION: Unit _____ Section 1 Township 18S Range 27E

9949 H 9949 L/H 1.000 G .660 % CO_2 .43 % N_2 .42 % H_2S —

GH 6566 P_{cr} 673 (TABLE IX & X) T_{cr} 374 (TABLE IX & X)

LINE		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	532	532						
2	T_s(B.H. °R)	608	608						
3	$T=(\frac{T_w + T_s}{2})$	570	570						
4	Z (Est.)	.800	.790						
5	TZ	456.0	450.4						
6	GH/TZ	14.399	14.578						
7	e^s(Table XIV)	1.716	1.727						
8	P_f or [illegible]	3249	3249						
9	P_f^2 or [illegible]	10556	10556						
10	$P_c^2 = P_f^2/e^s$ or [illegible]	6151.7	6110.6						
11	P_c or [illegible]	2480.3	$\boxed{2472.0}$	$= P_c$					
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	2864.6	2860.5						
13	$P_r = (P/P_{cr})$	4.26	4.25						
14	$T_r = (T/T_{cr})$	1.52	1.52						
15	Z (Table XI)	.790	.790						

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

WORK SHEET FOR CALCULATION OF WE. .IEAD PRESSURES (~~P~~ or P_w)

FROM KNOWN BOTTOM HOLE PRESSURE (~~P~~ or P_s)

Form C-1221
Adopted 9-1-65

COMPANY Mewbourne LEASE Chalk Bluff Fed. WELL NO. 1 DATE 3-18-91

LOCATION: Unit _____ Section 1 Township 18S Range 27E

L 9949 H 9949 L/H 1.00 G .660 % CO_2 .43 % N_2 .42 % H_2S —

GH 6566 P_{cr} 673 (TABLE IX & X) T_{cr} 374 (TABLE IX & X)

LINE		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	532	532	532	532	532	532	532	532
2	T_s(B.H. °R)	608	608	608	608	608	608	608	608
3	$T=(\frac{T_w + T_s}{2})$	570	570	570	570	570	570	570	570
4	Z (Est.)	.835	.783	.783	.781	.781	.780	.780	.792
5	TZ	476.0	446.5	446.5	445.1	445.2	444.8	444.6	451.7
6	GH/TZ	13.796	14.704	14.712	14.753	14.749	14.761	14.768	14.537
7	e^s(Table XIV)	1.678	1.736	1.736	1.739	1.739	1.739	1.740	1.725
8	~~P~~ or P_s	2983	2983	2831	2831	2593	2593	2152	2152
9	~~P~~ or P_s^2	8898.3	8898.3	8014.6	8014.6	6723.6	6723.6	4631.1	4631.1
10	~~P~~ $= P_f^2/e^s$ or $P_w^2 = P_s^2/e^s$	5304.3	5126.6	4616.2	4609.0	3867.2	3865.5	2661.7	2684.9
11	~~P~~ or P_w	2303.1	2264.2	2148.5	2146.9	1966.5	1966.1	1631.5	1638.6
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	2643.1	2623.6	2489.8	2488.9	2279.8	2279.5	1891.7	1895.3
13	$P_r = (P/P_{cr})$	3.93	3.90	3.70	3.70	3.39	3.39	2.81	2.82
14	$T_r = (T/T_{cr})$	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
15	Z (Table XI)	.783	.783	.781	.781	.780	.780	.792	.792

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

COMPANY: PRO WIRELINE

CLIENT: MEWBOURNE OIL

GAUGE NUMBER: 12235

WELL NAME: CHALK BLUFF

WELL NUMBER: 1

TEST NUMBER: 1

LOCATION:

TEST OPERATOR: BURRELL

COMMENTS: 4 POINT FLOW TEST RAN
AFTER 72 HOUR BUILD UP

POSITION	GAUGE SERIAL NUMBER
1	
2	
3	
4	

AGE START DATE: 3/15/91 GAUGE S/N: 12235

DATA FILE: 3

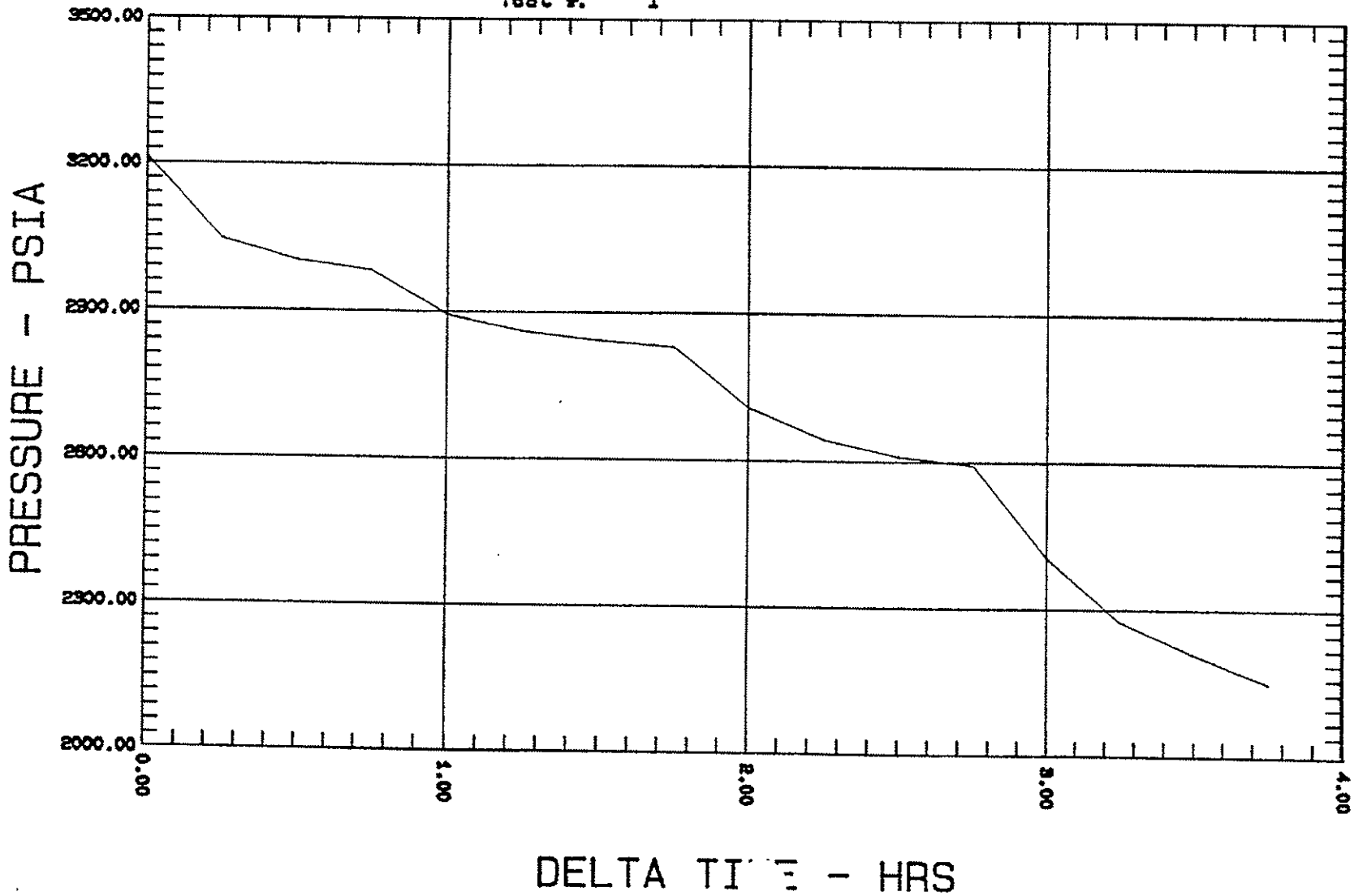
REAL TIME	DELTA TIME HRS	PRESSURE PSIA	TEMPERATURE °F	COMMENTS
9:45: 0	0.0000	3213.00		START RATE 1
10: 0: 0	0.2500	3046.00		
10:15: 0	0.5000	3003.00		
10:30: 0	0.7500	2983.00		START RATE 2
10:45: 0	1.0000	2894.00		
11: 0: 0	1.2500	2861.00		
11:15: 0	1.5000	2843.00		
11:30: 0	1.7500	2831.00		START RATE 3
11:45: 0	2.0000	2707.00		
12: 0: 0	2.2500	2643.00		
12:15: 0	2.5000	2610.00		
12:30: 0	2.7500	2593.00		START RATE 4
12:45: 0	3.0000	2405.00		
13: 0: 0	3.2500	2276.00		
13:15: 0	3.5000	2210.00		
13:30: 0	3.7500	2152.00		END OF TEST

Plot starting date: 3/15/91
time: 9: 45: 0

Gauge S/N

Company: PRO WIRELINE
Client: MEWBOURNE OIL
Well name: CHALK BLUFF
Well #: 1
Test #: 1

Location:
Operator: BURRELL
Comments: 4 POINT FLOW TEST RAN AFTER 72 HOUR BUILD UP



Form 3160-5
ne 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
SEP 28 1992
O. C. D.
ARTESIA, OFFICE

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

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

8. Well Name and No.
Chalk Bluff Fed.Com.#1

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-015-26575

3. Address and Telephone No.
P. O. Box 7698, Tyler, Texas 75711 (903) 561-2900

10. Field and Pool, or Exploratory Area
N.Illinois Camp-Mor.-Gas

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2250' FWL & 790' FSL Sec. 1, T18S-R27E

11. County or Parish, State
Eddy

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

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

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

8/13/92 - Perf Middle Morrow 9861-9882', 2 SPF, 10' Net, 22 holes.

8/14/92 - Acidized w/3500 gals 7½% HCL + additives + 1000 SCF/bbl nitrogen carrying 80 ball sealers. Flushed w/2% KCL wtr + 1000 SCF/bbl nitrogen. ISDP 4300#, 5 mins 3800#, 10 mins 3400#, 15 mins 2800#. Avg rate 3.7 BPM, AP 5000#, MP 5600#. Blew well down to pit 8/15 - 8/18/92.

8/19/92 - MI swab unit. Pressure tested tbg to 2000#.Held OK. Removed tree. RU BOP. RU swab. Swabbed well down to 5300'.

8/20/92 - Swabbed down to 6500'. POOH w/tbg & pkr. TIH w/new pkr assembly & 200 jts tbg. Tested tbg to 8000#. 8/21/92 - Continued testing tbg. Set pkr @ 9740.68' w/15 pts compression. Press annulus to 2000#. Held OK. Started swabbing. Had light blow of gas.

8/22/92 - RU Western Co. Acidized perfs w/1500 gals 7½% HCL acid + additives + 1000 scf/bbl nitrogen + 35 ball sealers. Flushed w/2% KCL wtr. ISDP 400#. 5 min 3700#, 10 min 3700#, 15 min 3600#. ATP 5100#, MTP 5400#. RD Western. Opened well to pit on 12/64" choke. No show of gas or oil. Recovering load.

8/23/92 - RU swab. FL @ 7000'. Swabbed dry in 3 runs. Continued swabbing. Recovering load.

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

Signed [signature] Title Engr. Oprns. Secretary Date 9/11/92

(This space for Federal or State office use)

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

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

*See Instruction on Reverse Side

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

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

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

CONFIDENTIAL

RECEIVED JUL 23 1992 O. C. D. ARTESIA, OFFICE

2. NAME OF OPERATOR: Mewbourne Oil Company

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements): At surface 2250' FWL & 790' FSL

At top prod. interval reported below

At total depth Same

5. LEASE DESIGNATION AND SERIAL NO.: NM-0557371

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME: Chalk Bluff Federal Com

9. WELL NO.: 1

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

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 1-T18S-R27

14. PERMIT NO. / DATE ISSUED: API #30-015-26575

12. COUNTY OR PARISH: Eddy

13. STATE: N.M.

15. DATE SPUDDED: 12/22/90

16. DATE T.D. REACHED: 1/29/91

17. DATE COMPL. (Ready to prod.): 3/07/91

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: KB 3625', GM 3609'

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD: 10,120'

21. PLUG, BACK T.D., MD & TVD: 10,079'

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY: → ROTARY TOOLS: X CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 9936-46', 9964-67' - Morrow

25. WAS DIRECTIONAL SURVEY MADE: Yes

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

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	54.50#	400'	17-1/2"	425 - Circ	None
9-5/8"	36#	2604'	12-1/4"	1025 - Circ	None
7"	26# & 29#	9450'	8-3/4"	1350 - Circ	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
4-1/2"	9051'	10119'	175	

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	9805'	9805'

31. PERFORATION RECORD (Interval, size and number)
9936-46', 9964-67'
13', 2 SPF, Total 28

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
9936-67'	3000 gals Mod-101 acid + 1000 SCF/bbl N2 + 50 ball sealers, Flushed w/35 bbls 2% KCL water + 1000 SCF/bbl N2.

33.* PRODUCTION

DATE FIRST PRODUCTION: | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): Flowing | WELL STATUS (Producing or shut-in): Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3/11/91	24 hrs	8/64"	→	1	886	0	886:1

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
1600#		→	1	886	0	58

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

TEST WITNESSED BY: W. Hoover

35. LIST OF ATTACHMENTS: Logs

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

SIGNED Dayna Thompson TITLE Engr. Oprns. Secretary DATE 3/18/91

ACCEPTED FOR RECORD
SAS
APR 1 1991
CARLSBAD, NEW MEXICO

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

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

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Lower Morrow	9936'	9967'	Sandstone
Middle Morrow	9861'	9881'	Sandstone

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Yates	424'	
Queen	1138'	
Grayburg	1484'	
San Andres	1976'	
Glorietta	3458'	
Tubb	4451'	
Drinkard	5376'	
Abo	5794'	
Wolfcamp	6420'	
Cisco	7666'	
Canyon	8368'	
Strawn	8844'	
Morrow	9454'	
Morrow Clastics	9770'	
Barnett	10016'	

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

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

c/5F
WL
GT
DP

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

I.

Operator	Well API No.
MEWBOURNE OIL COMPANY ✓	30-015-26575
Address: P. O. Box 7698, Tyler, Texas 75711	

Reason(s) for Filing (Check proper box)
- New Well [X]
- Recompletion [ ]
- Change in Operator [ ]
- Change in Transporter of: Oil [ ] Dry Gas [ ] Casinghead Gas [ ] Condensate [ ]
- Other (Please explain) [ ]

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

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
CHALK BLUFF FEDERAL	1	North Illinois Camp Morrow	State, Federal or Fee	NM-0557371

Location: Unit Letter N : 2250 Feet From The West Line and 790 Feet From The South Line

Section 1 Township 18 South Range 27 East NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

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

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When ?
	N	1	18S	27E	Yes	March, 1991

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

IV. COMPLETION DATA

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

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
12/22/90	3/07/91	10,120'	10,079'
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
KB 3625', GR 3609'	Morrow	9936'	9,805'

Perforations: 9936-46', 9964-67', 13',2 SPF,Total 28

Depth Casing Shoe: ----

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17-1/2"	13-3/8"	400'	425 Circ 20-2
12-1/4"	9-5/8"	2604'	1025 5-12-91
8-3/3"	7"	9450'	1350 temp BK
7"	4-1/2" Liner	10119'	175

V. TEST DATA AND REQUEST FOR ALLOWABLE

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

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

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
886	.24 hours	1	58°
Testing Method (pitot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
Back Pressure	1600#	----	8/64"

VI. OPERATOR CERTIFICATE OF COMPLIANCE

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

Gaylon Thompson
Signature

Gaylon Thompson, Engineering Operations
Printed Name / Title

March 11, 1991 (903) 561-2900
Date / Telephone No.

OIL CONSERVATION DIVISION

Date Approved MAY 1 6 1991

By ORIGINAL SIGNED BY MIKE WILLIAMS

Title SUPERVISOR, DISTRICT II

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

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

[redacted]

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OIL CONS COMMISS
Drawer DD
Artesia, NM 88210

C/SF

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
8. Well Name and No.: Chalk Bluff Fed. Comm. #1
9. API Well No.: 30-015-26575
10. Field and Pool, or Exploratory Area: N. Illinois Camp Morrow
11. County or Parish, State: Eddy Co., N.M.

1. Type of Well: ☐ Oil Well ■ Gas Well ☐ Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2250' FWL & 790' FSL Sec. 1-T18S-R27E Unit N

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

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

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

- Spot 8 sx. (50') cement plug on top of existing CIBP @ 7010'. Circulate hole with plug mud.
- Spot 17 sx. (100') cement plug @ 2650'.
- Spot 17 sx. (100') cement plug @ 450'.
- Cut off and remove wellhead.
- Spot 8 sx. (50') surface plug.
- Install cup and dry hole marker.
- Clean location.

RECEIVED
AUG 18 1995
OIL CON. DIV.
DIST. 2

JUN 7 10 AM '95
RECEIVED

14. I hereby certify that the foregoing is true and correct
Signed [signature] Title Engineer Date 5/25/95

(This space for Federal or State office use)
Approved by Orig. Signed by Shannon J. Shaw Title PETROLEUM ENGINEER Date 8/14/95
Conditions of approval, if any:

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

*See Instructions on Reverse Side

OCD - Artesia

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM-0557371

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

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

2. Name of Operator: Mewbourne Oil Com[any

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 790' FSL & 2250' FWL, Sec.1 T-18S R-27E

8. Well Name and No.: Chalk Bluff Federal Comm #1

9. API Well No.: 30-015-26575

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

11. County or Parish, State: Eddy, NM

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

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

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

The above caption well is currently under T/A status. Mewbourne Oil Company would like to extend this status. The well has a 7" CIBP above all perfs @ 7010'. We are considering converting this well into a SWD. At this time, Mewbourne would like to schelude a CIT (500 psi) & after passing, extend T/A status for an additional time.

If any question, please call.

NOV 2000 RECEIVED OCD - ARTESIA

TA Approval for 12 Month Period
Ending 10/25/2001

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

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

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

(This space for Federal or State office use)

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

Conditions of approval, if any:

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

*See Instruction on Reverse Side

C/SF

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

5. Lease Designation and Serial No.
NM-0557371

SUNDRY NOTICES AND REPORTS ON WELLS

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

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

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

8. Well Name and No.
Chalk Bluff Federal Comm #1

2. Name of Operator
Mewbourne Oil Com[any

9. API Well No.
30-015-26575

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

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
790' FSL & 2250' FWL, Sec.1 T-18S R-27E

11. County or Parish, State
Eddy, NM

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

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

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

The above caption well was successfully MIT'ed on 10/25/2000. (500 psi for 30 min.)
The pressure chart is enclosed.
If any question, please call.

ACCEPTED FOR RECORD
NOV 15 2000
43
BLM

RECEIVED
OCD - ARTESIA

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

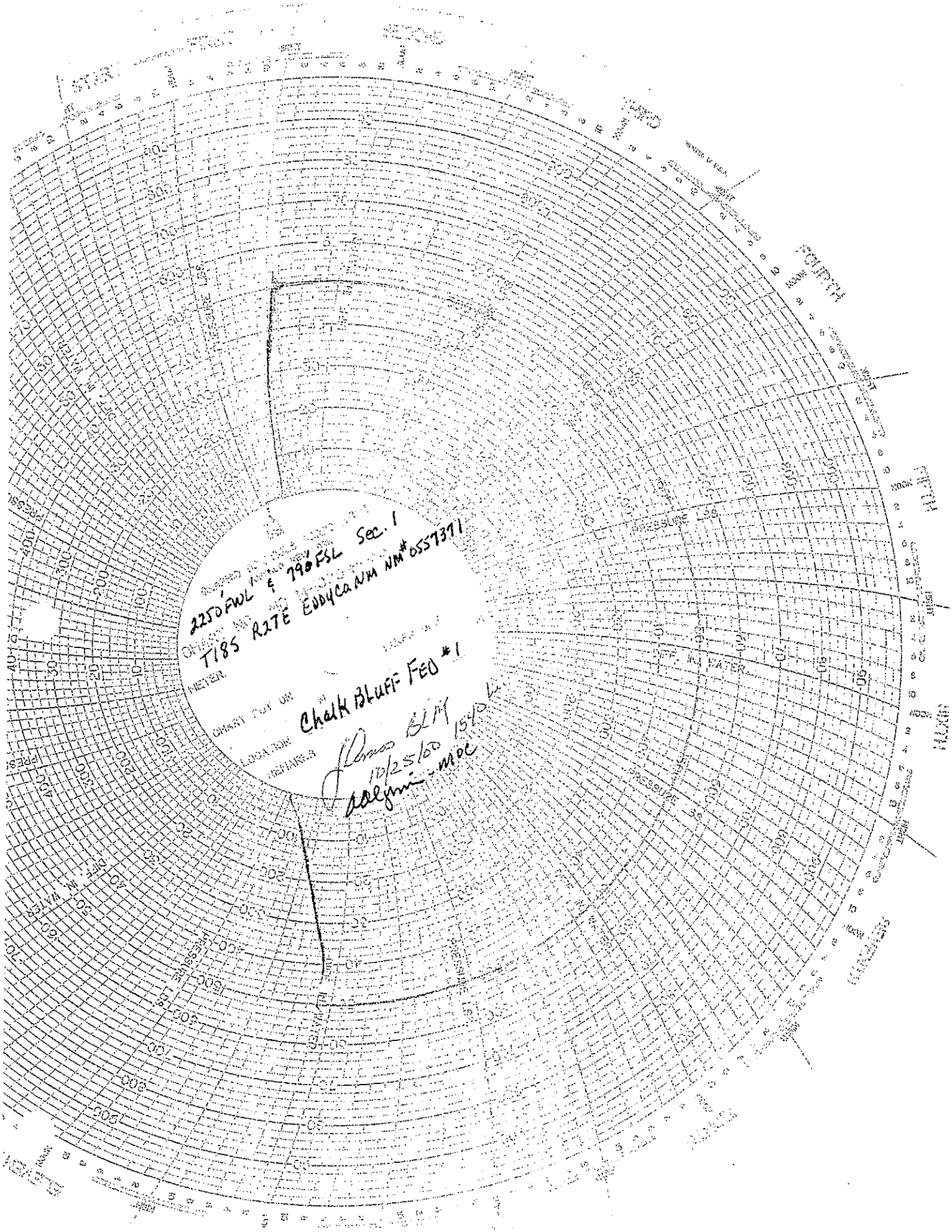
Signed [signature] Title N.M. Young District Manager Date 11/01/00

(This space for Federal or State office use)

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

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

*See Instruction on Reverse Side


2250' FWL & 790' FSL Sec. 1
T18S R27E Eddy Co NM NM# 0557371
METER
CHART PUT ON
LOCATION
REMARKS
Chalk Bluff FED #1
10/25/00
PRESSURE LBS
OFF IN WATER

NM OIL CONS COMMISSION
Drawer DD
Artesia, NM 88210

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

FEB 21 1994

1. Type of Well: ☐ Oil Well ■ Gas Well ☐ Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2250' FWL & 790' FSL Sec. 1-T18S-R27E
5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:
8. Well Name and No.: Chalk Bluff Fed. Com. #1
9. API Well No.: 30-015-26575
10. Field and Pool, or Exploratory Area: N. Illinois Camp
11. County or Parish, State: Eddy Co., N.M.

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

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

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

Mewbourne Oil Company here by requests temporarily abandon status pending further evaluation of the lease for the above well. The well was spudded 12/22/90.

APPROVED FOR 12 MONTH PERIOD
ENDING 1/25/95

14. I hereby certify that the foregoing is true and correct
Signed Robert G. Jones Title Petroleum Engineer Date 01/25/94

(This space for Federal or State office use)
Approved by (ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 2/16/94
Conditions of approval, if any:

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

*See Instruction on Reverse Side

NM OIL CONS. COMMISSION
Drawer DD
Artesia, NM 88210

dsf

Form 3160-3
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. Lease Designation and Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

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

NOV 17 1993
O. C. D.

8. Well Name and No.
Chalk Bluff Fed. Comm. #1

2. Name of Operator
Mewbourne Oil Company

9. API Well No.
30-015-26575

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

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2250' FWL & 790' FSL of Sec. 1-T18S-R27E

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

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

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

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

* Verbal from Adam Salameh

9/10/93 Abandon Morrow formation. Set CIBP @ 9800' & cover w/35' cement.
9/11/93 Perforate Cisco from 7826'-7830'. Test & evaluate.
9/12/93 Squeeze Cisco from 7826'-7830' w/600 sx. Class "C".
9/15/93 Drill out squeeze perfs. to 7792'. Squeeze held 2,000#.
9/16/93 Perforate Cisco from 7676'-7678'. Test and evaluate.
9/17/93 Abandon Cisco formation, set CIBP @ 7600' & cover w/35' cement.
9/18/93 Perforate Wolfcamp 7304'-7314'. Test & evaluate.
9/19/93 Acidize Wolfcamp w/1500 gal. 15% NE-FE from 7304'-7314'.
9/21/93 Set CIBP @ 7294' & perforate Wolfcamp from 7262'-7278'. Test & evaluate.
9/22/93 Acidize Wolfcamp w/2000 gal. 15% NE-FE from 7262'-7278'.
9/23/93 Set CIBP @ 7208' & perforate Wolfcamp from 7050'-7102'. Test & evaluate.
9/24/93 Acidize Wolfcamp w/2000 gal. 15% NE-FE from 7050'-7102'.
9/25/93 Set CIBP @ 7010'.

14. I hereby certify that the foregoing is true and correct
Signed Robert G. Jones Title Petroleum Engineer Date 10/05/93

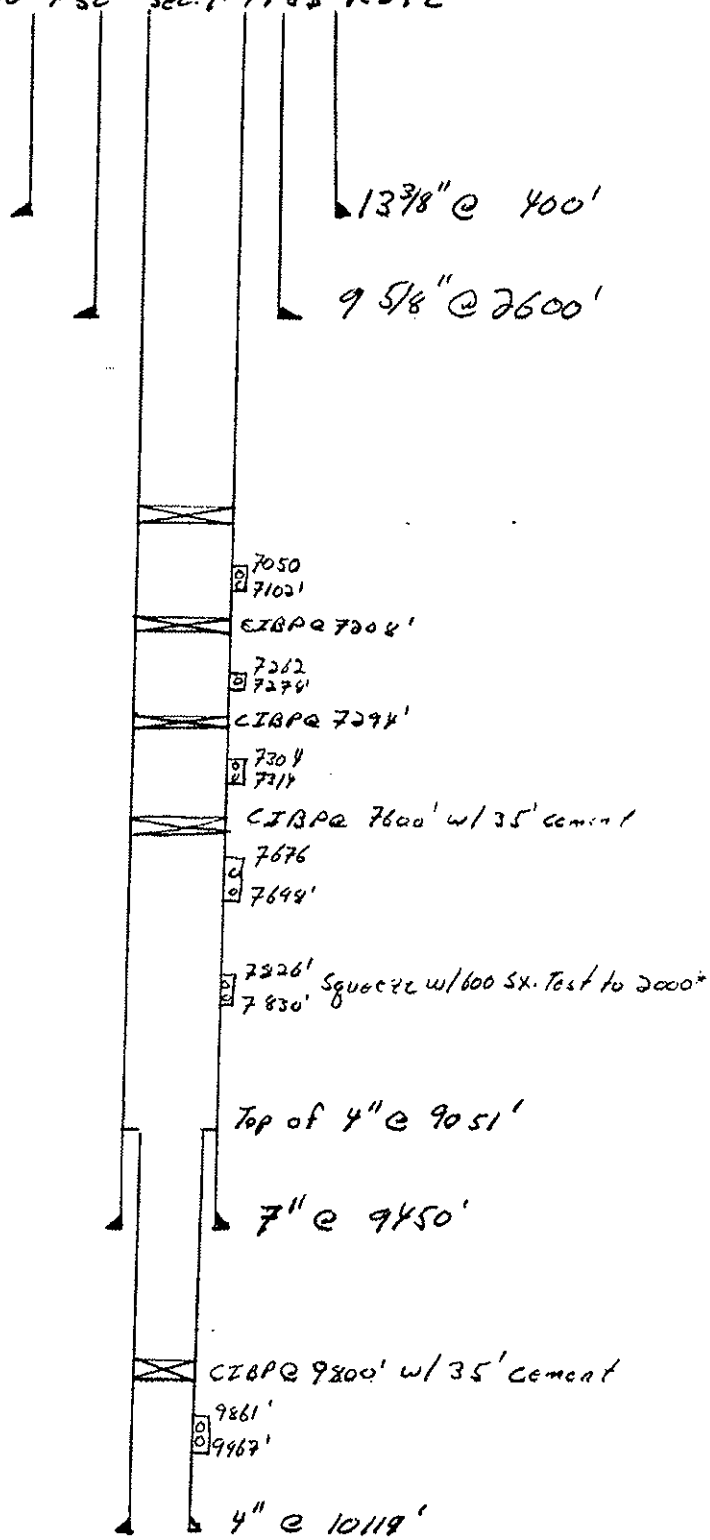
(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

ACCEPTED FOR RECORD
NOV 15 1993
CARLSBAD, NEW MEXICO

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

*See Instructions on Reverse Side

Newbourne Oil Company
Chuck Bluff Federal #1
2250' FWL & 790' FSL Sec. 1-T18S-R27E



C/SF

3160-5
1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

RECEIVED
OCT 19 1993
O.C.D.

5. Lease Designation and Serial No.: NM-0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation:

1. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other
2. Name of Operator: Mewbourne Oil Company
3. Address and Telephone No.: P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 2250' FWL & 790' FSL of Sec. 1-T18S-R27E
8. Well Name and No.: Chalk Bluff Fed. Com. #1
9. API Well No.: 30-015-26575
10. Field and Pool, or Exploratory Area: N. Illinois Camp
11. County or Parish, State: Eddy Co., N.M.

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

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

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

09/08/93 Abandon Morrow Perfs 9861' - 9967'

- Set CIBP @ 9800' - cover w/35' cement.
- Recomplete in Cisco Formation - Test & evaluate.
- If unecomomical recomplete in Wolfcamp - Test & evaluate.

RECEIVED
SEP 22 10 43 AM '93
CARL
AREA

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

Signed R. G. Jones Title Petroleum Engineer Date 09/07/93

(This space for Federal or State office use)

Approved by (ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 10/15/93
Conditions of approval, if any:

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

*See Instruction on Reverse Side

30-015-26575

Ogrid- 14744

Property- 7876

Pool- 78890

3-19-91

DUAL LAT.

2595-9446
9330-10112
DUAL SPACED
NEUTRON

Surf 9417
8500-10121

3-19-91

DUAL LAT.

2595-9446
9330-10112
DUAL SPACED
NEUTRON

Surf 9417
8500-10121

NC Tops DEM 5/14/91

Queen	1140
Grayburg	1630
San Andres	1975
Glorieta	3598
Abo	>
Wolfcamp	6860
Penn	
Strown	
Atoka	9435
Morrow	9703

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

31 January 2003

File Copy

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

RE: Chalk Bluff Federal Com # 1 N-1-18-27 API 30-015-26575 Violation of Rule 201: Idle Well

Dear Sirs:

This second directive is to notify you that this well is still in violation of Rule 201.

On 12 December, 2002 a letter was sent notifying you on the violation of Rule 201. On 3 January, 2003 the form C-104 was faxed to you indicating Navajo Refining was the operator of this well. To date no action has been taken.

Rule 201 of the New Mexico Oil Conservation Division provides as follows:

201 WELLS TO BE PROPERLY ABANDONED
201.A. The operator of any well drilled for oil, gas or injection; for seismic, core or other exploration, or for a service well, whether cased or uncased, shall be responsible for the plugging thereof. [7-12-90...2-1-96]
201.B. A well shall be either properly plugged and abandoned or temporarily abandoned in accordance with these rules within ninety (90) days after:
(1) A sixty (60) day period following suspension of drilling operations, or
(2) A determination that a well is no longer usable for beneficial purposes, or
(3) A period of one (1) year in which a well has been continuously inactive.
[7-12-90...2-1-96]

In the event that a satisfactory response is not received to this letter of direction by 15 March, 2003, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of **CIVIL PENALTIES** for your violation of OCD rules.

Sincerely,

Van Barton
Field Rep. II

To:

Shirley Jones – *CRUDE OIL SUPPLY CLERK*
LEASE RECORDS
Navajo Refining Company
P.O. Box 159
Artesia, NM 88211-0159
phone (505) 746-5325
fax (505) 746-5283
shirleyj@navajo-refining.com (please note the "j" after shirley)

TO:	District II	*COMPANY:*	Oil Conservation Division
FAX:	505-748-9720	*PHONE:*	505-748-1283
RE:	Chalk Bluff Federal Com #1 API No. 30-015-26575		

MESSAGE:

We have received the enclosed letter from you showing that Navajo Refining Company is the operator for the above referenced lease.

Navajo Refining Company is neither the operator, transporter or purchaser on this lease. Your Internet site shows Mewbourne Oil Company to be the operator.

We do have them as an operator on some of the leases that we transport. But this lease is not one of them.

We have contact information for them of: PO Box 7698, Tyler, TX 75711, with a New Mexico phone for Jerry Elgin of 505-393-5905.

If you have other information that shows Navajo Refining Company as the operator, would you please forward a copy to me so that I may research it further.

Thank you.

Shirley Jones

-Shirley Jones

Shirley – Please note the attached document signed by Darrell Moore.

Jerry

District I
1625 N. French Dr., Hobbs, NM 88240
District II
South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-104A
August 11, 2000

Submit copy of the final affected wells listing with 2 copies of this form per number of wells on that list to appropriate District Office

Change of Operator

Previous Operator Information:

OGRID: 14744
Name: Mewbourne Oil Company
Address: P. O. Box 7698
Address:
City, State, Zip: Tyler, TX 75711

New Operator Information:

Effective Date: 5 October, 2000
New Ogrid: 15694
New Name: Navajo Refining Company
Address: ~~100 Crescent Court, Ste 1600~~
Address: P.O. Box 159
City, State, Zip: ~~Dallas, TX 75201~~
Artesia, NM 88211

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

New Operator
Signature: Darrell Moore
Printed name: Darrell Moore
Title: Env. Mgr. for Water and Waste
Date: 12/5/00 Phone: 505-748-3311

Previous operator complete below:

Previous Operator: Mewbourne Oil Company
Previous OGRID: 14744
Signature: Monty Whetstone
Printed Name: Monty Whetstone

NMOCD Approval

Signature: Jim W. Gum
Printed Name: District Supervisor
District:
Date: NOV 27 2000

27021 - property code - Chalk Bluff Federal Com #1
1-18S-27E
30-015-26575 - API Number

Form 3160-5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Oil Cons.
N.M. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ Other TEMPORARILY ABANDONED

8. Well Name and No.
WDW-3 #3 23592

2. Name of Operator
NAVAJO REFINING COMPANY 15694

9. API Well No.
30-015-26575

3a. Address
PO BOX 159, ARTESIA, NM 88211

3b. Phone No. (include area code)
505-748-3311

10. Field and Pool, or Exploratory Area
NAVAJO INJECTION; PERMO-PENN

4. Location of Well (Footage, Sec., T, R., M., or Survey Description)
790' FSL, 2250' FWL, 1-18S-27E

11. County or Parish, State
EDDY

RECEIVED
OCT 2003
OCD - ARTESIA

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

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

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

Original well name was CHALK BLUFF FEDERAL COM. NO. 1

SUBJECT TO LIKE APPROVAL BY NMOCD

DRILL OUT BRIDGE PLUG AT 7010' AND CLEAN OUT TO 7208'.
INJECTION-TEST PERFORATIONS AT 7050' - 7102', 7262' - 7278' TO PLAN SQUEEZE-CEMENT JOB.
DRILL OUT BRIDGE PLUGS AT 7208' AND 7294'. CLEAN OUT HOLE THROUGH PERFS AT 7304'-7314'.
SQUEEZE-CEMENT PERFORATIONS AT 7050' - 7102', 7262' - 7278', AND 7304' - 7314'.
DRILL OUT BRIDGE PLUG AT 7600' AND CLEAN OUT TO TOP OF LINER AT 9051'.
RUN CBL/VDL AND CALIPER FROM 9051' TO SURFACE.
PERFORATE 8540' - 8620' AND 7660' - 8450'.
RUN INJECTIVITY TEST, AND ACIDIZE IF NECESSARY.
RUN INJECTION/FALLOFF TEST.
RUN DIFFERENTIAL TEMPERATURE SURVEY.
RUN RADIOACTIVE TRACER SURVEY.
INSTALL INJECTION TUBING AND PACKER TO APPROX. 7600'.
INSTALL WELL ANNULUS MONITORING EQUIPMENT, AND PREPARE WELL FOR INJECTION.

APPROVED
SEP 29 2003
LES BABYAK
PETROLEUM ENGINEER

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed) Darrell Moore
Title Env. Mgr. for Water Waste
Signature Darrell Moore
Date 9/17/03

Approved by (Signature)
Name (Printed/Typed)
Title
Office
Date

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

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

~~Accepted for record - NMOCD~~

(Continued on next page)

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30 - 015 -26575		Navajo Injection; Permo-Penn

[4] Property Code	[5] Property Name	[6] Well Number
23592	WDW	3

[7] OGRID No.	[8] Operator Name	[9] Elevation
15694	Navajo Refining Company	3609' GL; 3625' KB

[10] Surface Location

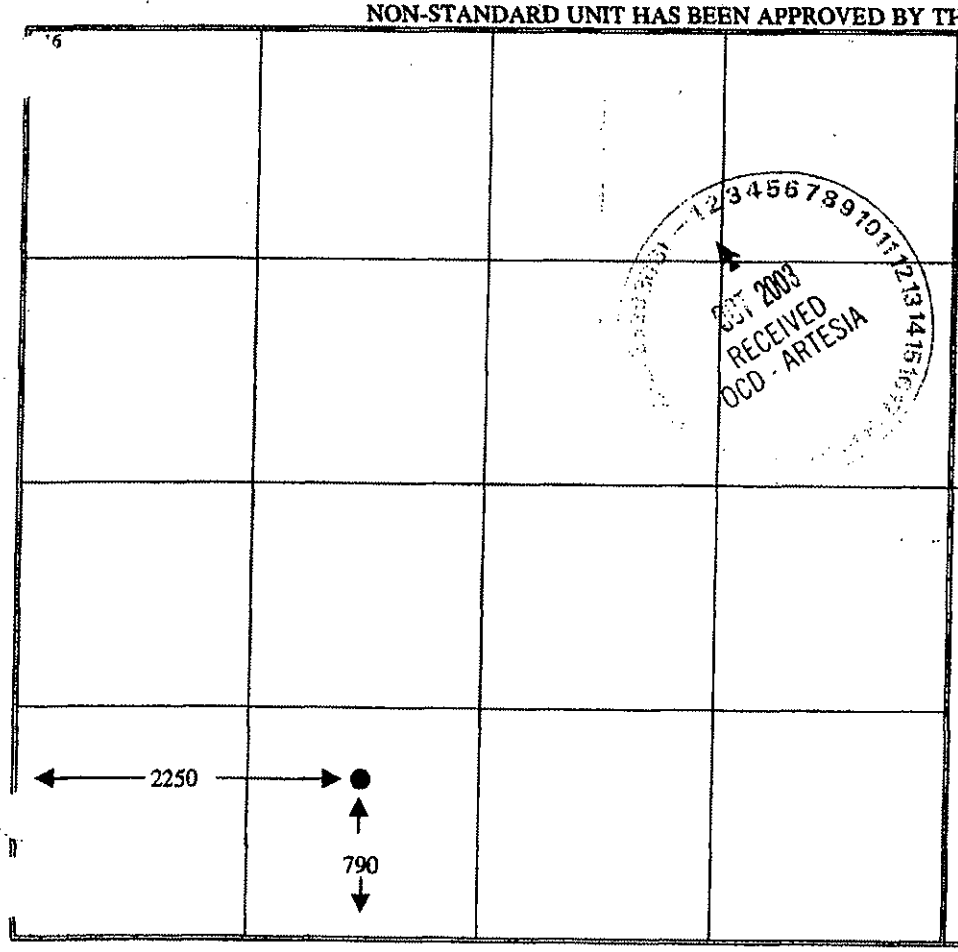
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	1	18S	27E		790	South	2250	West	Eddy

[11] Bottom Hole Location If Different From Surface

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

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

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



[17] OPERATOR CERTIFICATION

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

Signature: Darrell Moore

Printed Name: Darrell Moore

Title and E-mail Address: Env. Mgr. for Water & Waste darrell@navajo-refining.com

Date: 9/17/02

[18] SURVEYOR CERTIFICATION

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

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

Accepted for record - NMOCD

REENTRY PROCEDURE

NAVAJO REFINING COMPANY'S WDW-3 (PROPOSED)

790'FSL and 2250' FWL, Section 1, T18S, R27E
Eddy County, New Mexico
Chalk Bluff Federal Com. No. 1, API No. 30-015-26575

All depths are in feet below well's original kelly bushing height (RKB) of 16 feet above ground level. The original KB elevation is 3625 feet above mean sea level. The ground level elevation is 3609 feet above mean sea level.

Tops of Geologic Formations (from RKB)

The base of the lowermost USDW is at 420 feet.

San Andres	1976 feet	Lower Wolfcamp	7303 feet
Yeso	4030 feet	Cisco	7650 feet
Abo	5380 feet	Canyon	8390 feet
Wolfcamp	6745 feet	Strawn	8894 feet

Depth of Plugs

7010 feet in 7-inch casing above perforations 7050 feet to 7102 feet
7208 feet in 7-inch casing above perforations 7262 feet to 7278 feet
7294 feet in 7-inch casing above perforations 7304 feet to 7314 feet
7600 feet in 7-inch casing above perforations 7676 feet to 7678 and 7826 feet to 7830 feet
9800 feet in 4-1/2-inch liner above perforations 9861 feet to 9967 feet

Anticipated Formation Pressure

The expected bottom-hole pressure is 3448 pounds per square inch absolute (psia) at 9000 feet, for a gradient of 0.383 pounds per square inch (psi) per foot, or an equivalent

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mud weight of 7.36 pounds per gallon (ppg). The bottom-hole pressure was determined from the pressure measured in Navajo's WDW-2, or 2813 psia, at 7570 feet. Navajo's WDW-2 is completed in the same interval proposed for WDW-3 and is located in 12-T18S-R27E, 3200 feet southwest of proposed WDW-3. The average specific gravity of the fluid in the Cisco and Canyon Formations is expected to be 1.025, which is the specific gravity of the fluid swabbed from WDW-2 in June 1999 from the interval between 7826 feet and 8399 feet. The expected bottom-hole pressure at 9000 feet in proposed WDW-3 is calculated below:

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

Reentry Procedure

1. Level location to accommodate a workover rig, pump, tanks, and ancillary equipment. Build a small working pit approximately 30 feet square and 3 feet deep with a plastic lining. Move in the rig, tank, shale shaker, and work string.

2. Install a 7-1/16-inch, 3000-psi double hydraulic blowout preventer (BOP) and a 7-1/16-inch, 3000-psi annular BOP (see Exhibit A for schematic). Pressure test the BOP stack and casing to 1500 psi for 30 minutes. Pick up a 6-1/8-inch bit, and sufficient 4-3/4-inch drill collars to drill out the cement plugs, on a 2-7/8-inch work string. Mix a tank of 8.5-ppg sodium chloride brine water for circulating fluid.

3. Run the bit to 7000 feet and circulate the wellbore fluid out of the casing into a frac tank for disposal. Drill out the cast iron bridge plug (CIBP), cement at 7010 feet, and clean out to the CIBP at 7208 feet. Circulate the hole clean and pump into the perforations from 7050 feet to 7102 feet to establish a rate and pressure for a pending squeeze cement job.

4. Drill out the CIBP at 7208 feet and clean out past the perforations from 7262 feet to 7278 feet and drill out the third CIBP at 7294 feet. Clean out below the perforations from 7304 feet to 7314 feet. Run a second injection test for injection rate and pressure comparison.

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5. Pull the bit and run a retrievable squeeze packer on the work string. Set the packer at 7150 feet and test for communication between the perforations. Squeeze the perforations from 7262 feet to 7278 feet and 7304 feet to 7314 feet with approximately 100 sacks of neat cement (actual squeeze cement volume to be determined by the injection rate established previously), attempting to reach 1500 psi to 2000 psi squeeze pressure. Release the packer and reverse out any excess cement, then re-test the perforations to the squeeze pressure.

6. Re-set the packer at 6900 feet and squeeze the perforations from 7050 feet to 7102 feet as before.

7. Lay down the squeeze packer and drill out the cement to the CIBP at 7600 feet. Conduct a pressure test to 500 psi for 12 hours to confirm the squeeze cement will contain the annular fluid pressure required during injection operations.

8. Drill out the CIBP at 7600 feet and circulate to the top of the liner at 9051 feet. Circulate the casing clean with 8.5-ppg brine water. Pull the bit and lay down the drill collars.

9. Run a cement bond log with variable density (CBL/VDL) from the liner top to the surface, followed by a baseline multi-finger caliper log from the liner top to the surface.

10. Perforate the intervals 8540 feet to 8620 feet and 7660 feet to 8450 feet with 2 JSPF, using hollow steel carrier perforating guns.

11. Run the work string and retrievable packer to 7600 feet. Swab, or backflow, the perforated interval to recover a representative sample of the formation water for laboratory analysis. Monitor the recovered fluid for hydrogen sulfide.

12. Conduct a short injectivity test with 8.5-ppg brine water to determine the need for stimulation. If required, stimulate the perforations with acid (type and amount to be determined from injectivity results), followed by 500 barrels of 8.5-ppg brine water.

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13. Pull the work string and lay it down. Run a surface readout pressure gauge, with memory backup, to 7600 feet. Conduct an injection test down the casing at 420 gallons per minute for 12 hours (7200 barrels). Shut the well in and record the pressure falloff for a minimum of 12 hours.

14. Pull the gauges and run a differential temperature survey from surface to 9100 feet. Run a radioactive tracer survey to demonstrate mechanical integrity.

15. Run a tubing conveyed injection packer on 4-1/2-inch, 11.60 lb/ft, K-55, LT&C, 8rd injection tubing. Set the packer at approximately 7600 feet. Fill the annular space with 8.5-ppg brine water containing oxygen scavenger and corrosion inhibitor. Land the injection tubing in the wellhead and install the upper section.

16. Pressure test the annulus as required by New Mexico regulations.

17. Install well annulus monitoring equipment and prepare the well for injection.

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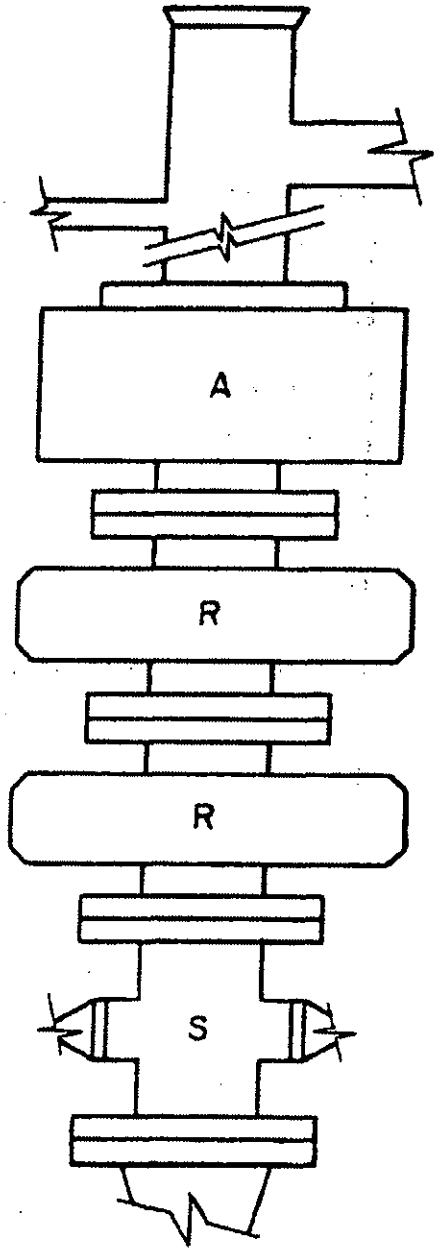


A = ANNULAR BLOWOUT PREVENTER
7-1/16", 3000 psi working pressure

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

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

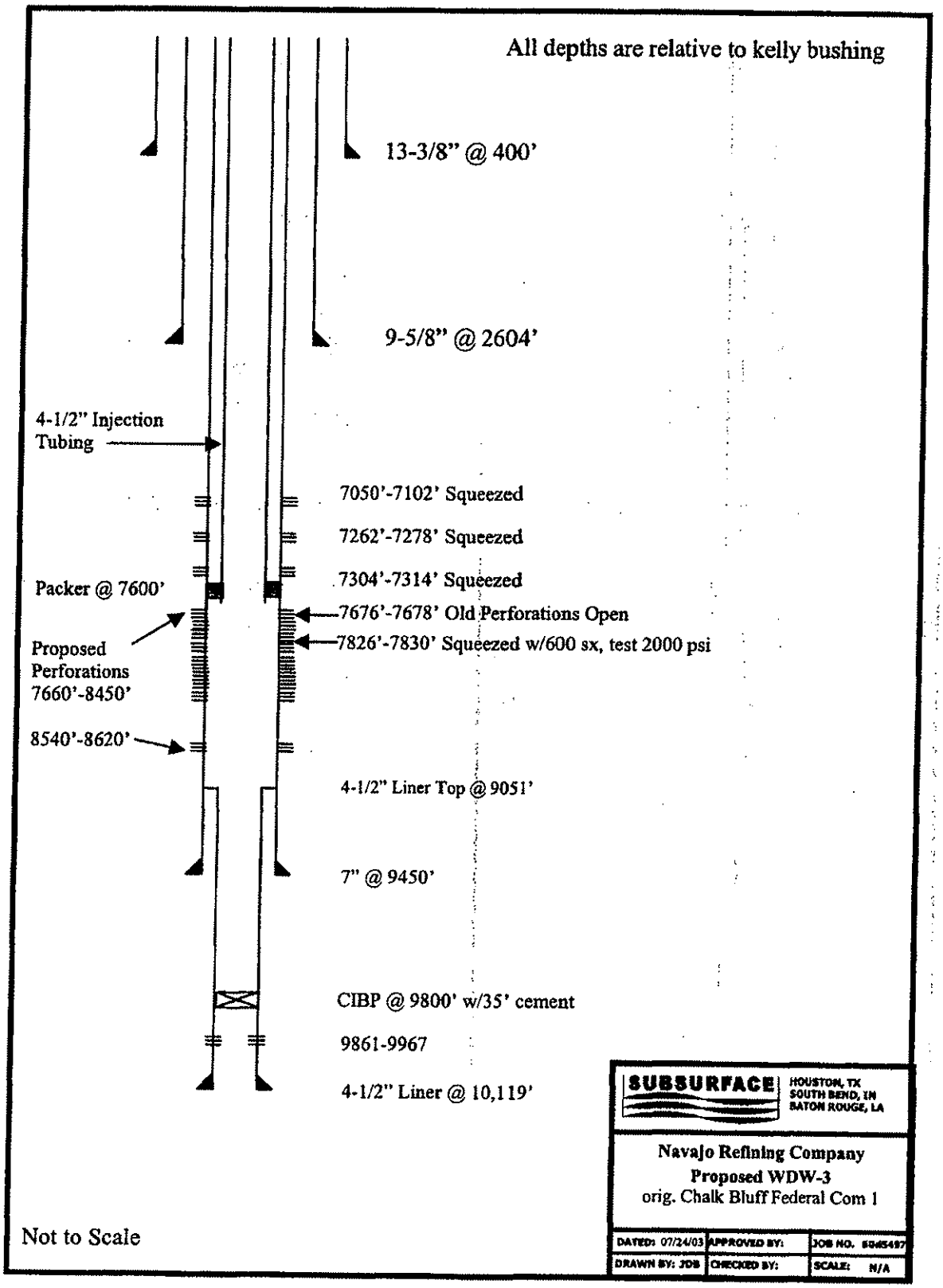
Manual Choke Manifold 2", 3000 psi working pressure

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

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

Exhibit A
Blowout Preventer Minimum Requirements

DATED: 07/24/03	APPROVED BY:	JOB NO. 69d5497
DRAWN BY: JDB	CHECKED BY:	SCALE: N/A



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SURFACE USE PLAN

NAVAJO REFINING COMPANY
PROPOSED WDW-3
790' FSL, 2250' FWL, 1-T 18S-R27E
EDDY COUNTY, NEW MEXICO

1. Existing Roads: Existing roads that lead to the proposed drillsite are shown on Exhibit A.

2. Access Roads To Be Constructed: No new access road is proposed.

3. Location of Existing Wells: Existing wells within one mile of proposed WDW-3 are shown on Exhibit B.

4. Location of Proposed Facilities If Well Is Completed: The well will be shut in after completion and testing.

5. Location and Type of Water Supply: Water for reentry, testing, and completion operations will be purchased from a commercial water hauler.

6. Source of Construction Materials: No construction materials will be required.

7. Methods of Handling Waste Disposal:

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

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

   C. Water produced during tests will be disposed of in the drilling pits.

   D. Trash, waste paper, garbage, and junk will be buried in a trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.

   E. All trash and debris will be buried or removed from the wellsite after finishing drilling and/or completion operations.

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8. Ancillary Facilities: None anticipated.

9. Wellsite Layout:

   A. The existing well pad will be leveled to accommodate a workover rig, pump, tanks, and ancillary equipment.

   B. Existing topsoil to a depth of 6 inches will be lifted and stockpiled at the uphill end of the well pad. The stockpiled topsoil will be located uphill to avoid mixing with subsurface materials.

   C. The well pad will be surfaced with material found in place.

   D. A small working pit will be constructed to hold drilling fluids and cuttings. The approximate dimensions of the pit will be 30 feet x 30 feet x 3 feet.

   E. The working pit for drilling fluids and cuttings will be lined with 6-mil plastic.

10. Plans for Restoration of Surface:

   A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk.

   B. Any unguarded pits containing fluids will be fenced until they are filled.

   C. After abandonment, all equipment, trash, and junk will be removed and the location cleaned.

   D. The stockpiled topsoil will be spread over the surface of the location.

11. Surface Ownership: U.S. Department of Interior, Bureau of Land Management.

12. Archaeological Survey: Navajo Refining Company is conducting an archeological survey. The report of the survey will be submitted by Navajo under separate cover.

13. Operator's Representatives: Representatives responsible for assuring compliance with the approved Surface Use Plan:

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Mr. Darrell Moore
Navajo Refining Company
Post Office Box 159
Artesia, New Mexico 88211
505/748-3311

Mr. Jim Bundy
Subsurface Technology, Inc.
7020 Portwest Drive, Suite 100
Houston, Texas 77024
713/880-4640

Exhibits

A. Topographic Map
B. Oil and Gas Map

14. Certification:

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

9/17/03
Date

Darrell Moore
Signature

Darrell Moore
Name

Env. Mgr. for Water & Waste
Title

Navajo Refining Company
Company

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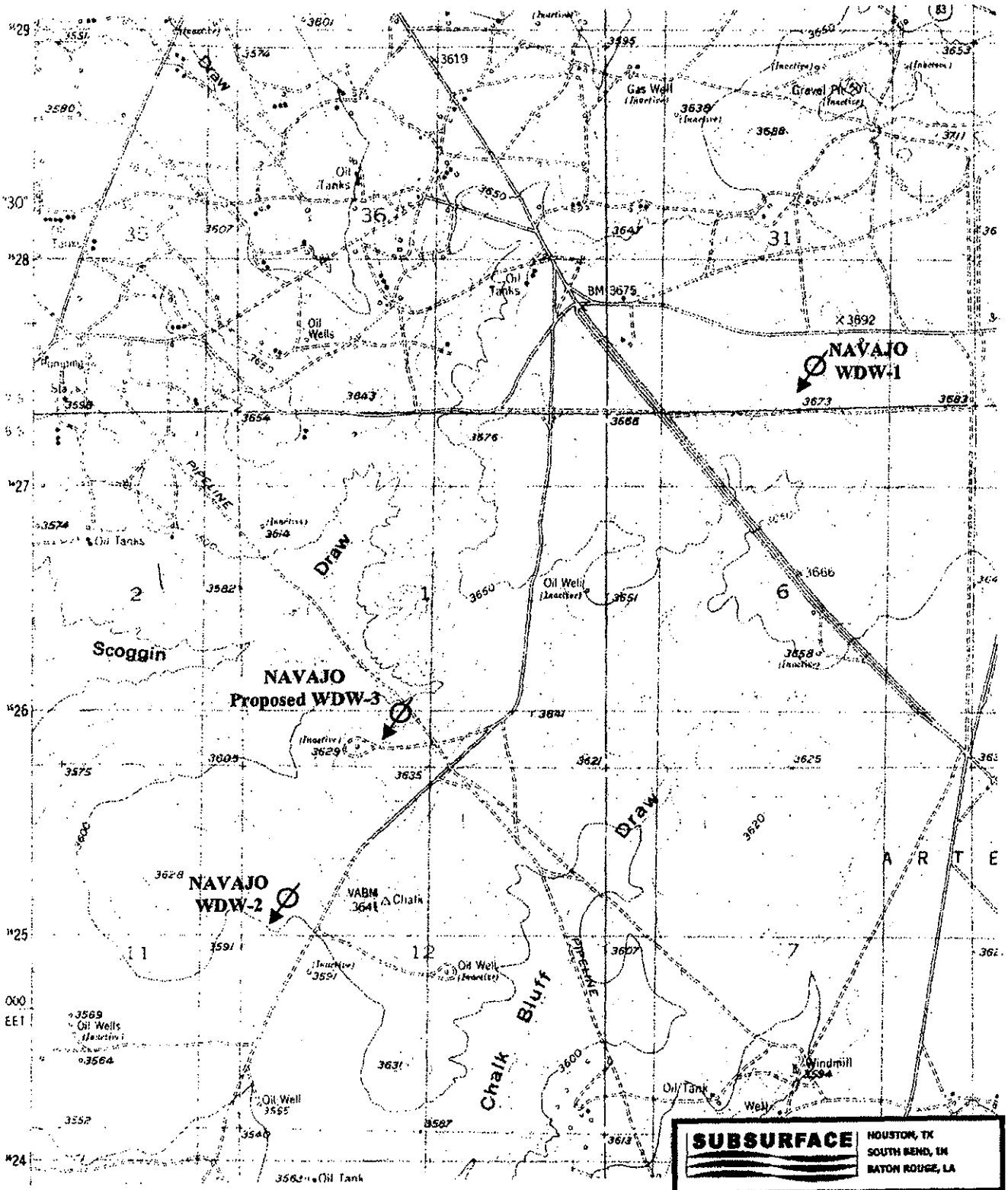


USGS Topographic Map
Red Lake Quadrangle, Eddy County, NM

Section corners marked with +

Accepted for record - NMOCD

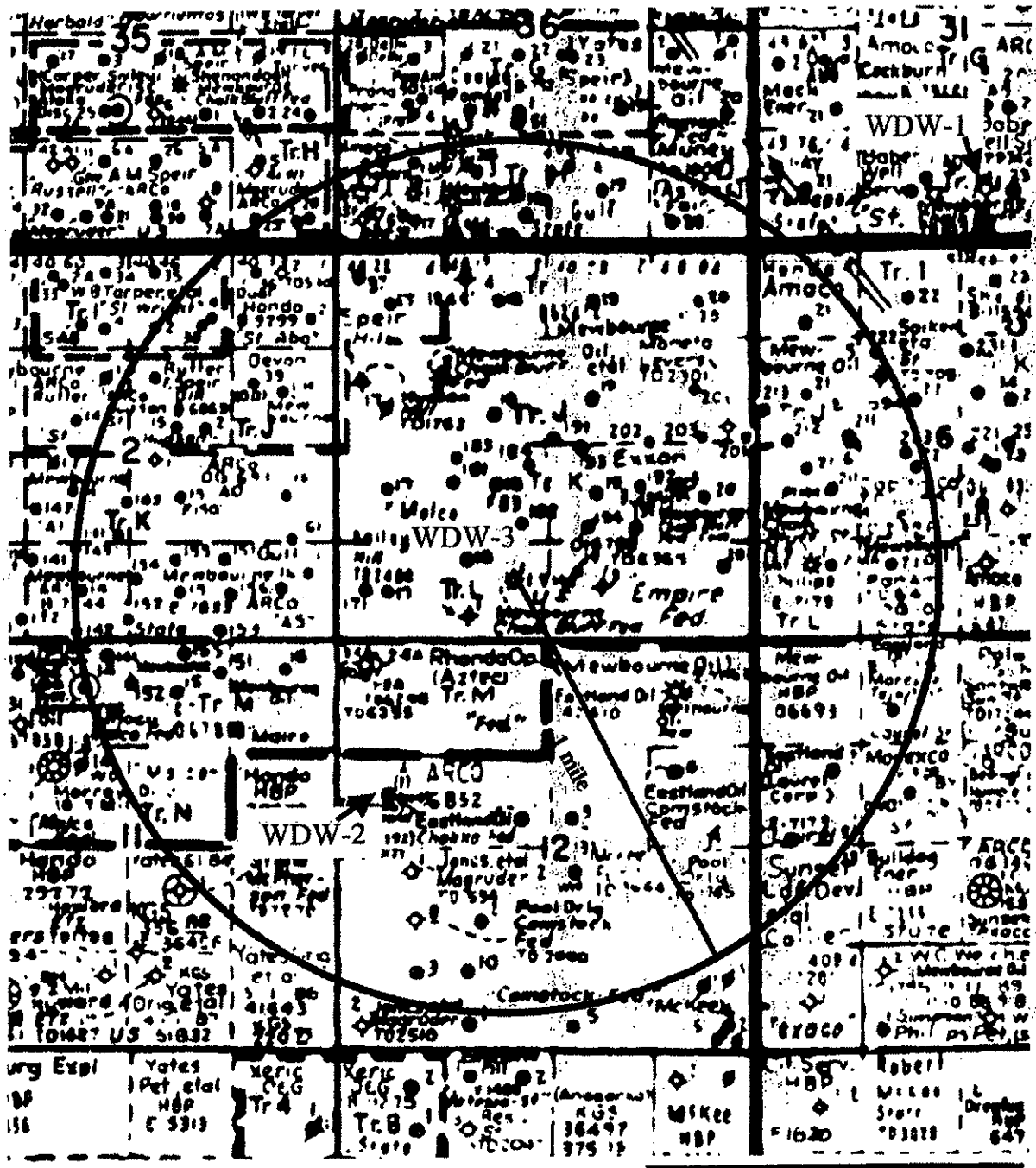
SUBSURFACE HOUSTON, TX SOUTH BEND, IN BATON ROUGE, LA

EXHIBIT A
NAVAJO REFINING COMPANY
PROPOSED WDW-3
790' FSL, 2250' FWL 1-18S-27E

DATE: 7/28/03	APPROVED BY: NLN	JOB NO: 6005497
DRAWN BY:	CHECKED BY:	SCALE: 1"=2000'

T17S - R27E

T17S - R28E



T18S - R27E

EDDY COUNTY, NM

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

EXHIBIT B

WELLS WITHIN 1 MILE OF

NAVAJO REFINING COMPANY

PROPOSED WDW-3

DATED: 7/28/03	APPROVED BY: NLN	JOB NO. 6005497
DRAWN BY:	CHECKED BY:	SCALE: N/A

Accepted for record - NMOCD

Map courtesy of Midland Map Company

OCD-ARTESIA

Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

5. Lease Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.
WDW-3

2. Name of Operator NAVAJO REFINING COMPANY

9. API Well No.
30-015-26575

3a. Address
P.O. BOX 159, ARTESIA, NM 8821

3b. Phone No. (include area code)
505-746-5281

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OCD-ARTESIA

10. Field and Pool, or Exploratory Area
NAVAJO INJECTION; PERMO-PEN

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
790' FSL, 2250' FWL, 1-18S - 27E

11. County or Parish, State
EDDY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other RECOMPLETE AS CLASS 1 INJECTION WELL
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☑ Water Disposal	

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

ORIGINAL WELL NAME WAS CHALK BLUFF FEDERAL COM. NO. 1
WELL WILL BE PLUGGED BACK AND COMPLETED AS A CLASS I INJECTION WELL AS FOLLOWS:

DRILL OUT BRIDGE PLUG AT 7010' AND CLEAN OUT TO 7208';
INJECTION-TEST PERFORATIONS AT 7050'-7102', 7262'-7278' TO PLAN SQUEEZE CEMENT JOB;
DRILL OUT BRIDGE PLUGS AT 7208' AND 7294'. CLEAN OUT HOLE THROUGH PERFS AT 7304'-7314';
SQUEEZE-CEMENT PERFORATIONS AT 7050'-7102',7262'-7278', AND 7304'-7314';
DRILL OUT BRIDGE PLUG AT 7600' AND CLEAN OUT TO TOP OF LINER AT 9051';
RUN CBL/VDL AND CALIPER FROM 9051' TO SURFACE;
PERFORATE 8540'-8620' AND 7660'-8450';
RUN INJECTIVITY TEST, AND ACIDIZE IF NECESSARY;
RUN INJECTION/FALLOFF TEST;
RUN DIFFERENTIAL TEMPERATURE SURVEY;
RUN RADIOACTIVE TRACER SURVEY;
INSTALL INJECTION TUBING AND PACKER TO APPROX. 7600'; AND
INSTALL WELL ANNULUS MONITORING EQUIPMENT, AND PREPARE FOR WELL INJECTION.

ACCEPTED FOR RECORD
JUL 12 2006
LES BABYAK
PETROLEUM ENGINEER

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)
DARRELL MOORE

Title ENVIRONMENTAL MANAGER FOR WATER & WASTE

Signature Darrell Moore

Date 6/29/06

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Accepted for record
NMOCD

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

Office

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

(Instructions on page 2)

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

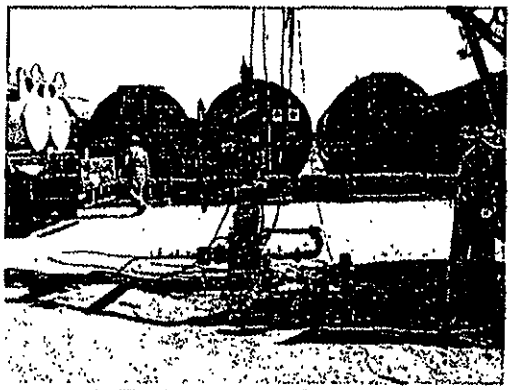


Image 1: Facing west. Christmas Tree with 500-barrel tanks in background. Far left tank was the only tank providing salt water. Truck on left is the pump truck pumping brine water only. Right truck is the rig truck (Wood Group Logging Service).

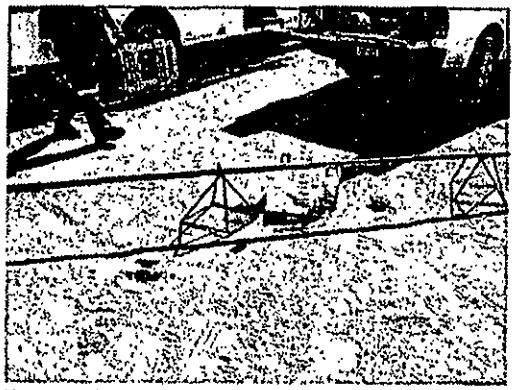


Image 2: Radioactive tool set up. Tracer, Iodine 131 (half-life ~ 8 days).

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

Image 4: Petroplex workers prepping wellhead for wire line tool entry.

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

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

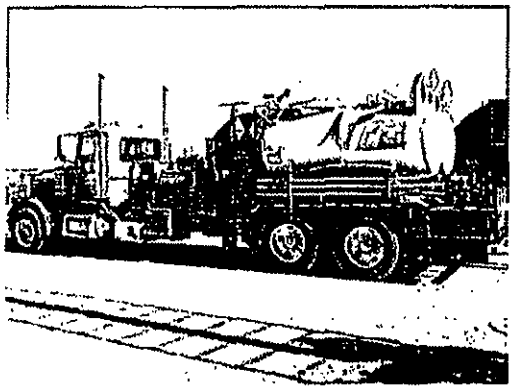


Image 6: Pump truck, Petroplex, for Brine water pumping only. No HCL used throughout process.

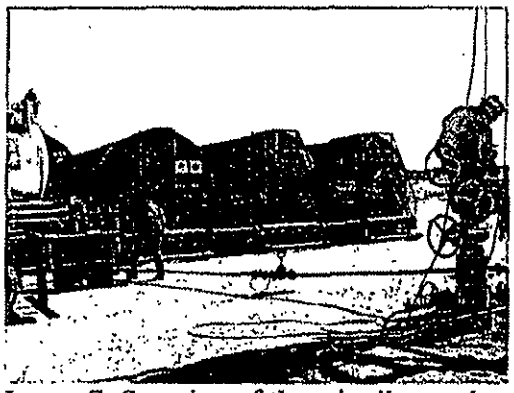


Image 7: Securing of the wire line to the wellhead.

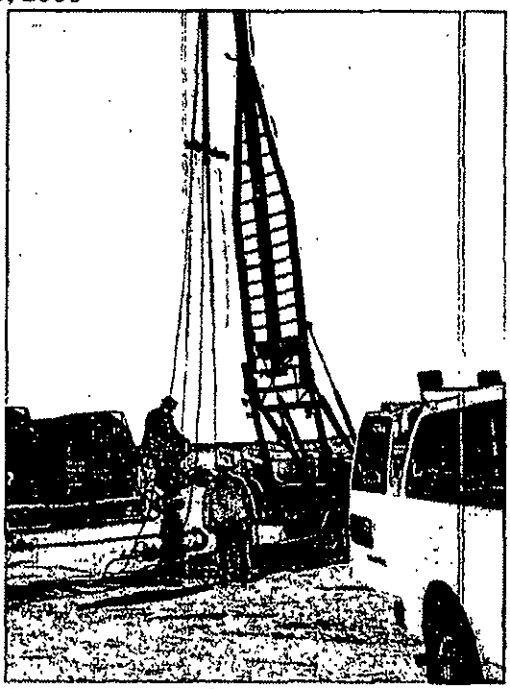


Image 8: Wood Group employee securing wellhead for tool entry.

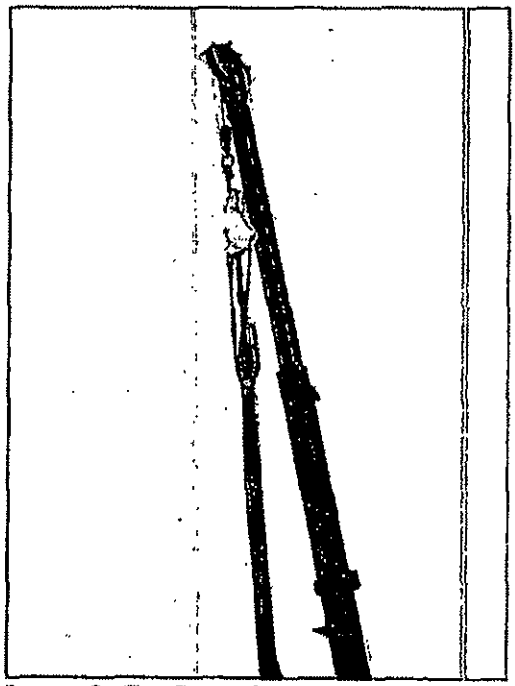
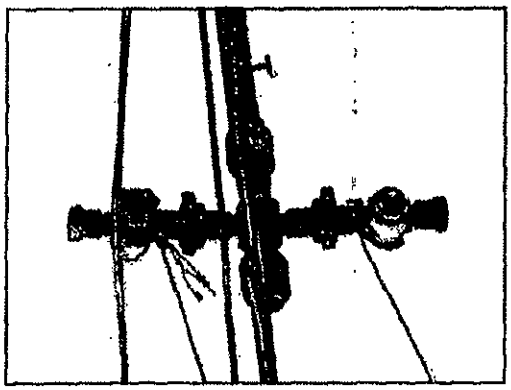


Image 9: Configuration at the top end of the boom.

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



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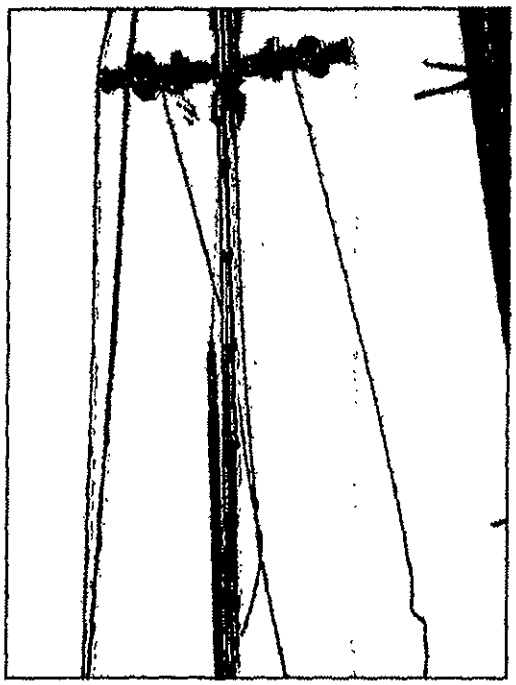

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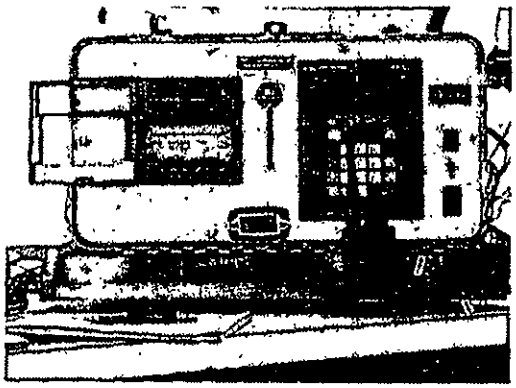

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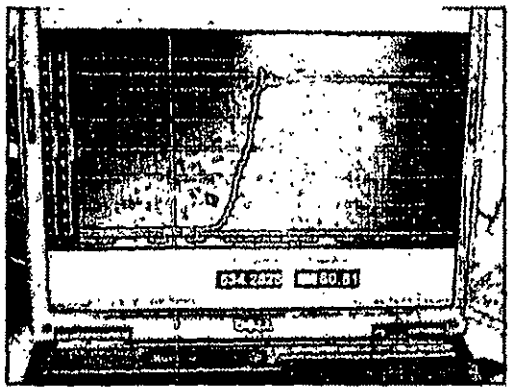

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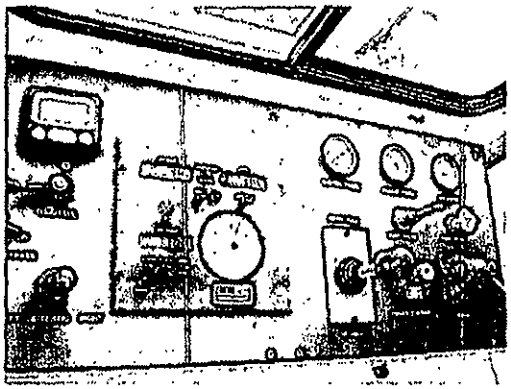

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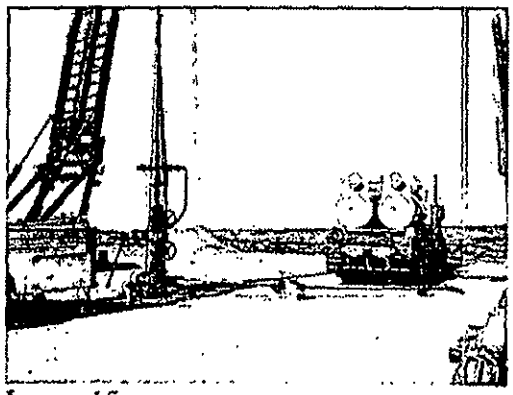
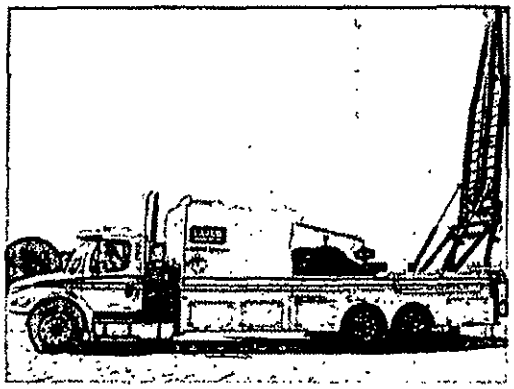


Image 15:

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



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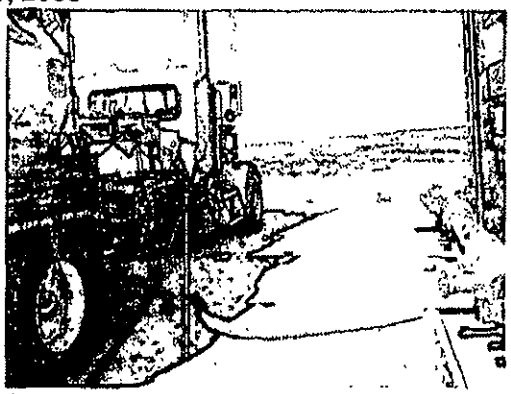

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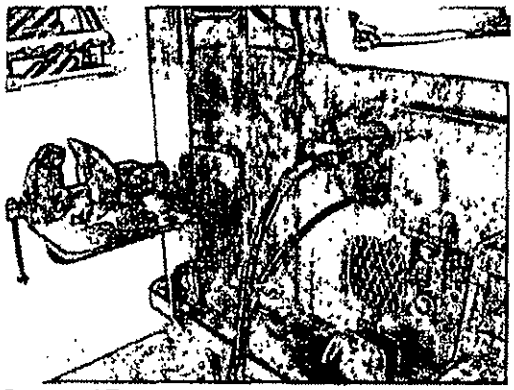

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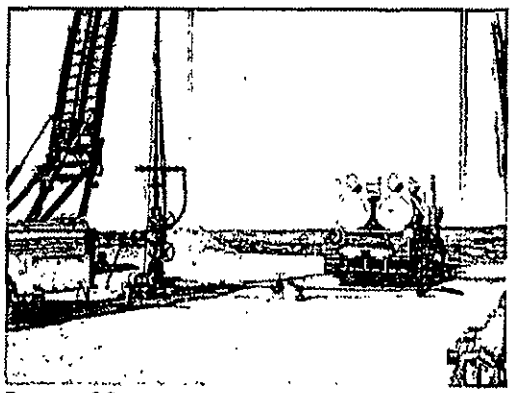

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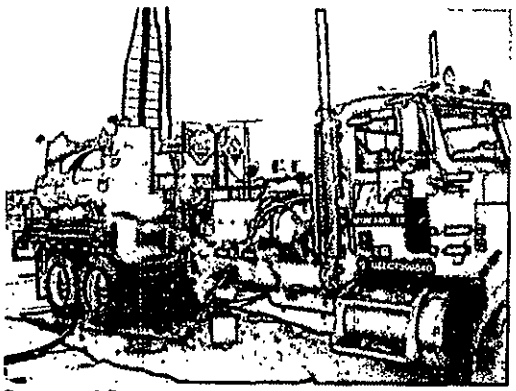

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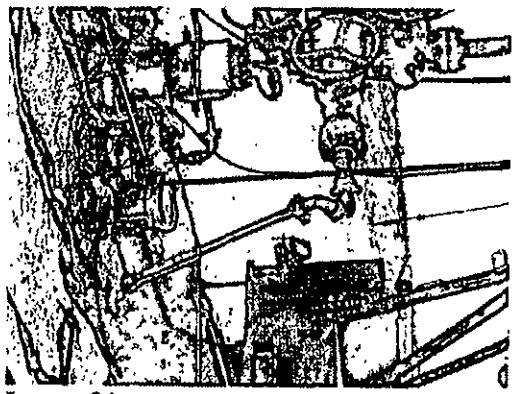
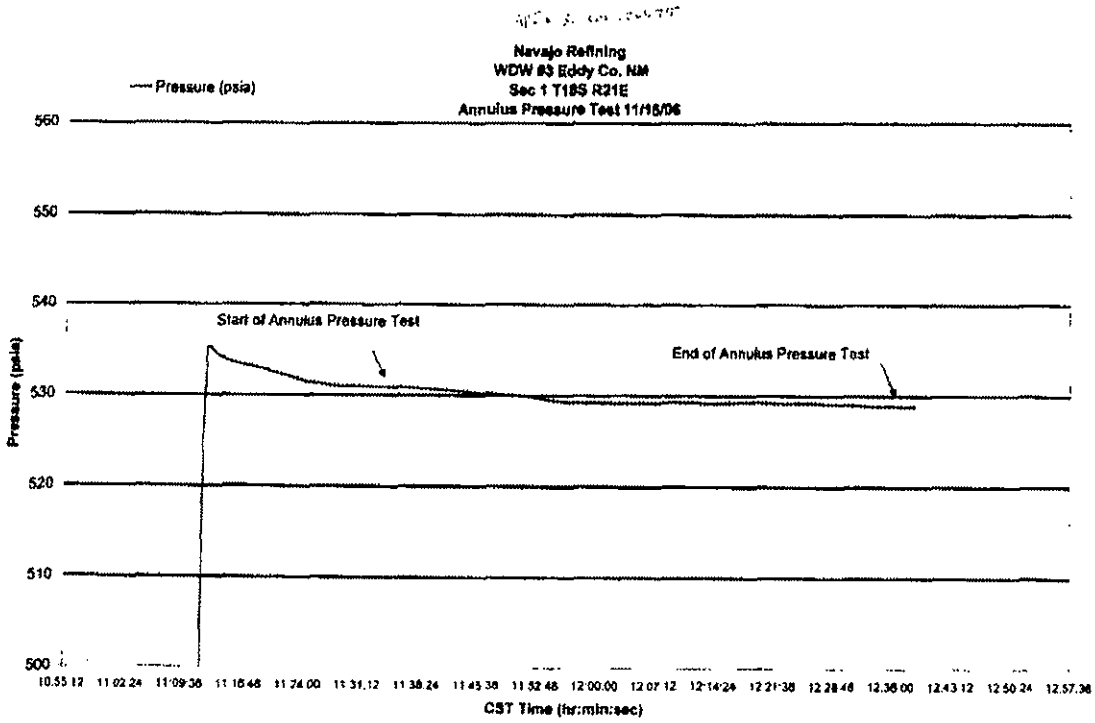
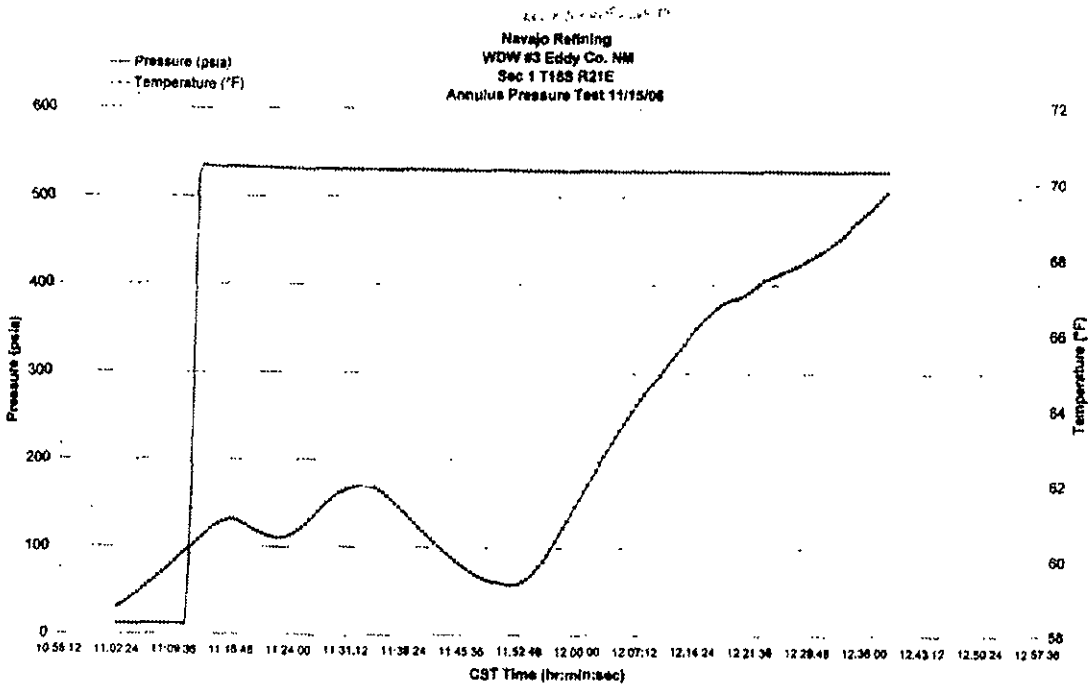


Image 21:

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





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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-101
May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

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

[1] Operator Name and Address	OGRID Number
NAVAJO RENING COMPANY	API Number 30 – 015-26575

Property Code	Property Name	Well No.
	WDW	3

Proposed Pool 1	Proposed Pool 2
NAVAJO INJECTION; PERMO-PENN	

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	1	18S	27E		2250 FWL		750 FSL		EDDY

[8] Proposed Bottom Hole Location If Different From Surface

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

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
E	I	R		3609
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
NO	9051'	CANYON		

Depth to Groundwater	Distance from nearest fresh water well	Distance from nearest surface water
UNKNOWN	1.25 MI TO 18.28.7.330	10 MILES

Pit: Liner: Synthetic ☐ ____ mils thick Clay ☐ Pit Volume: ____ bbls

Closed-Loop System ☐

Drilling Method:
Fresh Water ☐ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13 3/8"	54.50#	400'	425 - CIRC	
12-1/4"	9 5/8"	36#	2604'	1025 - CIRC	
8-3/4"	7"	26# and 29#	9450'	1350 - CIRC	

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

ORIGINAL WELL NAME WAS CHALK BLUFF FEDERAL COM. NO. 1
WELL WILL BE PLUGGED BACK AND COMPLETED AS A CLASS I INJECTION WELL AS FOLLOWS:
DRILL OUT BRIDGE PLUG AT 7010' AND CLEAN OUT TO 7208';
INJECTION-TEST PERFORATIONS AT 7050'-7102', 7262'-7278' TO PLAN SQUEEZE CEMENT JOB;
DRILL OUT BRIDGE PLUGS AT 7208' AND 7294'. CLEAN OUT HOLE THROUGH PERFS AT 7304'-7314';
SQUEEZE-CEMENT PERFORATIONS AT 7050'-7102',7262'-7278', AND 7304'-7314';
DRILL OUT BRIDGE PLUG AT 7600' AND CLEAN OUT TO TOP OF LINER AT 9051';
RUN CBL/VDL AND CALIPER FROM 9051' TO SURFACE;
PERFORATE 8540'-8620' AND 7660'-8450';
RUN INJECTIVITY TEST, AND ACIDIZE IF NECESSARY;
RUN INJECTION/FALLOFF TEST;
RUN DIFFERENTIAL TEMPERATURE SURVEY;
RUN RADIOACTIVE TRACER SURVEY;
INSTALL INJECTION TUBING AND PACKER TO APPROX. 7600', AND
INSTALL WELL ANNULUS MONITORING EQUIPMENT, AND PREPARE FOR WELL INJECTION.

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Printed name: Darrell Moore
Title: Env. Mgr. for Water & Waste
E-mail Address: darrell.moore@navajo-refining.com
Date: 6/29/06 Phone: 505-746-5281

OIL CONSERVATION DIVISION
Approved by: Wayne Price
Title:
Approval Date: 8/11/06 Expiration Date: 8/11/07
Conditions of Approval Attached ☑ DISTRICT OFFICE MUST APPROVE CASING PROGRAM.

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30 - 015 -26575		Navajo Injection; Permo-Penn

[4] Property Code	[5] Property Name	[6] Well Number
	WDW	3

[7] OGRID No.	[8] Operator Name	[9] Elevation
	Navajo Refining Company	3609' GL; 3625' KB

[10] Surface Location

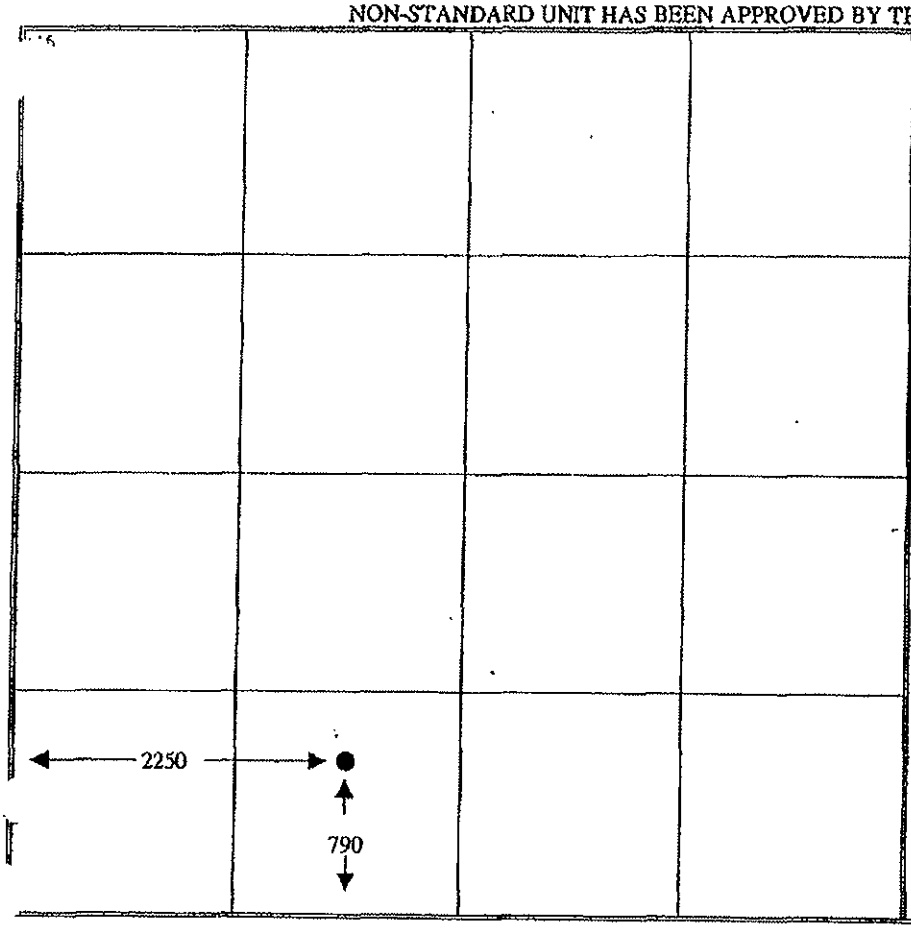
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	1	18S	27E		790	South	2250	West	Eddy

[11] Bottom Hole Location If Different From Surface

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

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

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



[17] OPERATOR CERTIFICATION

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

Signature: Darrell Moore

Printed Name: Darrell Moore

Title and E-mail Address: Env. Mgr. for Water & Waste darrell@navajo-refining.com

Date: 9/17/03

[18] SURVEYOR CERTIFICATION

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

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

REENTRY PROCEDURE

NAVAJO REFINING COMPANY'S WDW-3 (PROPOSED)

790'FSL and 2250' FWL, Section 1, T18S, R27E
Eddy County, New Mexico
Chalk Bluff Federal Com. No. 1, API No. 30-015-26575

All depths are in feet below well's original kelly bushing height (RKB) of 16 feet above ground level. The original KB elevation is 3625 feet above mean sea level. The ground level elevation is 3609 feet above mean sea level.

Tops of Geologic Formations (from RKB)

The base of the lowermost USDW is at 420 feet.

San Andres	1976 feet	Lower Wolfcamp	7303 feet
Yeso	4030 feet	Cisco	7650 feet
Abo	5380 feet	Canyon	8390 feet
Wolfcamp	6745 feet	Strawn	8894 feet

Depth of Plugs

7010 feet in 7-inch casing above perforations 7050 feet to 7102 feet
7208 feet in 7-inch casing above perforations 7262 feet to 7278 feet
7294 feet in 7-inch casing above perforations 7304 feet to 7314 feet
7600 feet in 7-inch casing above perforations 7676 feet to 7678 and 7826 feet to 7830 feet
9800 feet in 4-1/2-inch liner above perforations 9861 feet to 9967 feet

Anticipated Formation Pressure

The expected bottom-hole pressure is 3448 pounds per square inch absolute (psia) at 9000 feet, for a gradient of 0.383 pounds per square inch (psi) per foot, or an equivalent

mud weight of 7.36 pounds per gallon (ppg). The bottom-hole pressure was determined from the pressure measured in Navajo's WDW-2, or 2813 psia, at 7570 feet. Navajo's WDW-2 is completed in the same interval proposed for WDW-3 and is located in 12-T18S-R27E, 3200 feet southwest of proposed WDW-3. The average specific gravity of the fluid in the Cisco and Canyon Formations is expected to be 1.025, which is the specific gravity of the fluid swabbed from WDW-2 in June 1999 from the interval between 7826 feet and 8399 feet. The expected bottom-hole pressure at 9000 feet in proposed WDW-3 is calculated below:

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

Reentry Procedure

1. Level location to accommodate a workover rig, pump, tanks, and ancillary equipment. Build a small working pit approximately 30 feet square and 3 feet deep with a plastic lining. Move in the rig, tank, shale shaker, and work string.

2. Install a 7-1/16-inch, 3000-psi double hydraulic blowout preventer (BOP) and a 7-1/16-inch, 3000-psi annular BOP (see Exhibit A for schematic). Pressure test the BOP stack and casing to 1500 psi for 30 minutes. Pick up a 6-1/8-inch bit, and sufficient 4-3/4-inch drill collars to drill out the cement plugs, on a 2-7/8-inch work string. Mix a tank of 8.5-ppg sodium chloride brine water for circulating fluid.

3. Run the bit to 7000 feet and circulate the wellbore fluid out of the casing into a frac tank for disposal. Drill out the cast iron bridge plug (CIBP), cement at 7010 feet, and clean out to the CIBP at 7208 feet. Circulate the hole clean and pump into the perforations from 7050 feet to 7102 feet to establish a rate and pressure for a pending squeeze cement job.

4. Drill out the CIBP at 7208 feet and clean out past the perforations from 7262 feet to 7278 feet and drill out the third CIBP at 7294 feet. Clean out below the perforations from 7304 feet to 7314 feet. Run a second injection test for injection rate and pressure comparison.

5. Pull the bit and run a retrievable squeeze packer on the work string. Set the packer at 7150 feet and test for communication between the perforations. Squeeze the perforations from 7262 feet to 7278 feet and 7304 feet to 7314 feet with approximately 100 sacks of neat cement (actual squeeze cement volume to be determined by the injection rate established previously), attempting to reach 1500 psi to 2000 psi squeeze pressure. Release the packer and reverse out any excess cement, then re-test the perforations to the squeeze pressure.

6. Re-set the packer at 6900 feet and squeeze the perforations from 7050 feet to 7102 feet as before.

7. Lay down the squeeze packer and drill out the cement to the CIBP at 7600 feet. Conduct a pressure test to 500 psi for 12 hours to confirm the squeeze cement will contain the annular fluid pressure required during injection operations.

8. Drill out the CIBP at 7600 feet and circulate to the top of the liner at 9051 feet. Circulate the casing clean with 8.5-ppg brine water. Pull the bit and lay down the drill collars.

9. Run a cement bond log with variable density (CBL/VDL) from the liner top to the surface, followed by a baseline multi-finger caliper log from the liner top to the surface.

10. Perforate the intervals 8540 feet to 8620 feet and 7660 feet to 8450 feet with 2 JSPF, using hollow steel carrier perforating guns.

11. Run the work string and retrievable packer to 7600 feet. Swab, or backflow, the perforated interval to recover a representative sample of the formation water for laboratory analysis. Monitor the recovered fluid for hydrogen sulfide.

12. Conduct a short injectivity test with 8.5-ppg brine water to determine the need for stimulation. If required, stimulate the perforations with acid (type and amount to be determined from injectivity results), followed by 500 barrels of 8.5-ppg brine water.

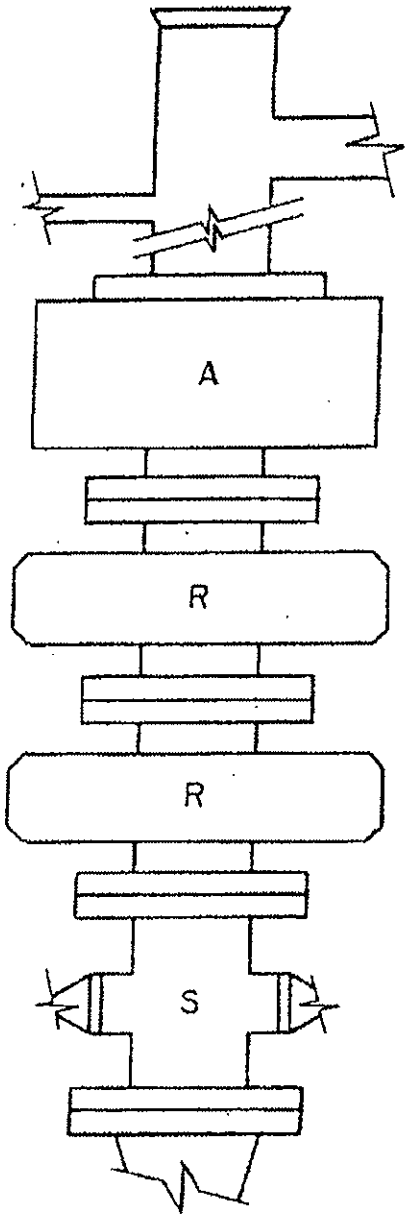
13. Pull the work string and lay it down. Run a surface readout pressure gauge, with memory backup, to 7600 feet. Conduct an injection test down the casing at 420 gallons per minute for 12 hours (7200 barrels). Shut the well in and record the pressure falloff for a minimum of 12 hours.

14. Pull the gauges and run a differential temperature survey from surface to 9100 feet. Run a radioactive tracer survey to demonstrate mechanical integrity.

15. Run a tubing conveyed injection packer on 4-1/2-inch, 11.60 lb/ft, K-55, LT&C, 8rd injection tubing. Set the packer at approximately 7600 feet. Fill the annular space with 8.5-ppg brine water containing oxygen scavenger and corrosion inhibitor. Land the injection tubing in the wellhead and install the upper section.

16. Pressure test the annulus as required by New Mexico regulations.

17. Install well annulus monitoring equipment and prepare the well for injection.



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

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

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

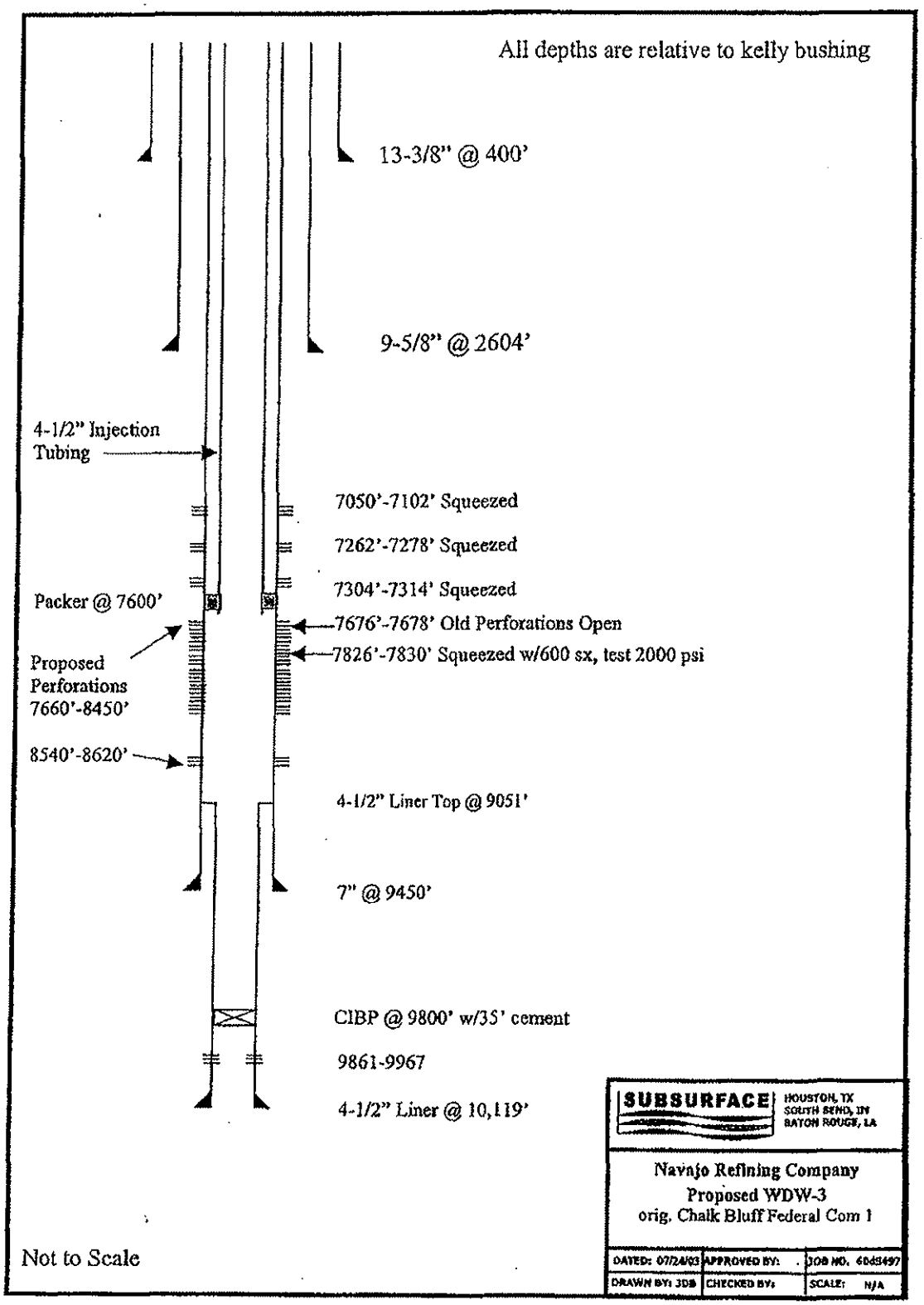
Manual Choke Manifold 2", 3000 psi working pressure

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

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

Exhibit A
Blowout Preventer Minimum
Requirements

DATED: 07/24/03	APPROVED BY:	JOB NO. 6405497
DRAWN BY: JDB	CHECKED BY:	SCALE: N/A


All depths are relative to kelly bushing
13-3/8" @ 400'
9-5/8" @ 2604'
4-1/2" Injection Tubing
7050'-7102' Squeezed
7262'-7278' Squeezed
7304'-7314' Squeezed
Packer @ 7600'
7676'-7678' Old Perforations Open
7826'-7830' Squeezed w/600 sx, test 2000 psi
Proposed Perforations 7660'-8450'
8540'-8620'
4-1/2" Liner Top @ 9051'
7" @ 9450'
CIBP @ 9800' w/35' cement
9861-9967
4-1/2" Liner @ 10,119'
Not to Scale
SUBSURFACE
HOUSTON, TX
SOUTH BEND, IN
BATON ROUGE, LA
Navajo Refining Company
Proposed WDW-3
orig. Chalk Bluff Federal Com 1
DATED: 07/24/03
APPROVED BY:
JOB NO. 6045497
DRAWN BY: JDB
CHECKED BY:
SCALE: N/A

SURFACE USE PLAN

NAVAJO REFINING COMPANY
PROPOSED WDW-3
790' FSL, 2250' FWL, 1-T 18S-R27E
EDDY COUNTY, NEW MEXICO

1. Existing Roads: Existing roads that lead to the proposed drillsite are shown on Exhibit A.

2. Access Roads To Be Constructed: No new access road is proposed.

3. Location of Existing Wells: Existing wells within one mile of proposed WDW-3 are shown on Exhibit B.

4. Location of Proposed Facilities If Well Is Completed: The well will be shut in after completion and testing.

5. Location and Type of Water Supply: Water for reentry, testing, and completion operations will be purchased from a commercial water hauler.

6. Source of Construction Materials: No construction materials will be required.

7. Methods of Handling Waste Disposal:

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

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

   C. Water produced during tests will be disposed of in the drilling pits.

   D. Trash, waste paper, garbage, and junk will be buried in a trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.

   E. All trash and debris will be buried or removed from the wellsite after finishing drilling and/or completion operations.

8. Ancillary Facilities: None anticipated.

9. Wellsite Layout:

   A. The existing well pad will be leveled to accommodate a workover rig, pump, tanks, and ancillary equipment.

   B. Existing topsoil to a depth of 6 inches will be lifted and stockpiled at the uphill end of the well pad. The stockpiled topsoil will be located uphill to avoid mixing with subsurface materials.

   C. The well pad will be surfaced with material found in place.

   D. A small working pit will be constructed to hold drilling fluids and cuttings. The approximate dimensions of the pit will be 30 feet x 30 feet x 3 feet.

   E. The working pit for drilling fluids and cuttings will be lined with 6-mil plastic.

10. Plans for Restoration of Surface:

   A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk.

   B. Any unguarded pits containing fluids will be fenced until they are filled.

   C. After abandonment, all equipment, trash, and junk will be removed and the location cleaned.

   D. The stockpiled topsoil will be spread over the surface of the location.

11. Surface Ownership: U.S. Department of Interior, Bureau of Land Management.

12. Archaeological Survey: Navajo Refining Company is conducting an archeological survey. The report of the survey will be submitted by Navajo under separate cover.

13. Operator's Representatives: Representatives responsible for assuring compliance with the approved Surface Use Plan:

Mr. Darrell Moore
Navajo Refining Company
Post Office Box 159
Artesia, New Mexico 88211
505/748-3311

Mr. Jim Bundy
Subsurface Technology, Inc.
7020 Portwest Drive, Suite 100
Houston, Texas 77024
713/880-4640

Exhibits

A. Topographic Map
B. Oil and Gas Map

14. Certification:

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

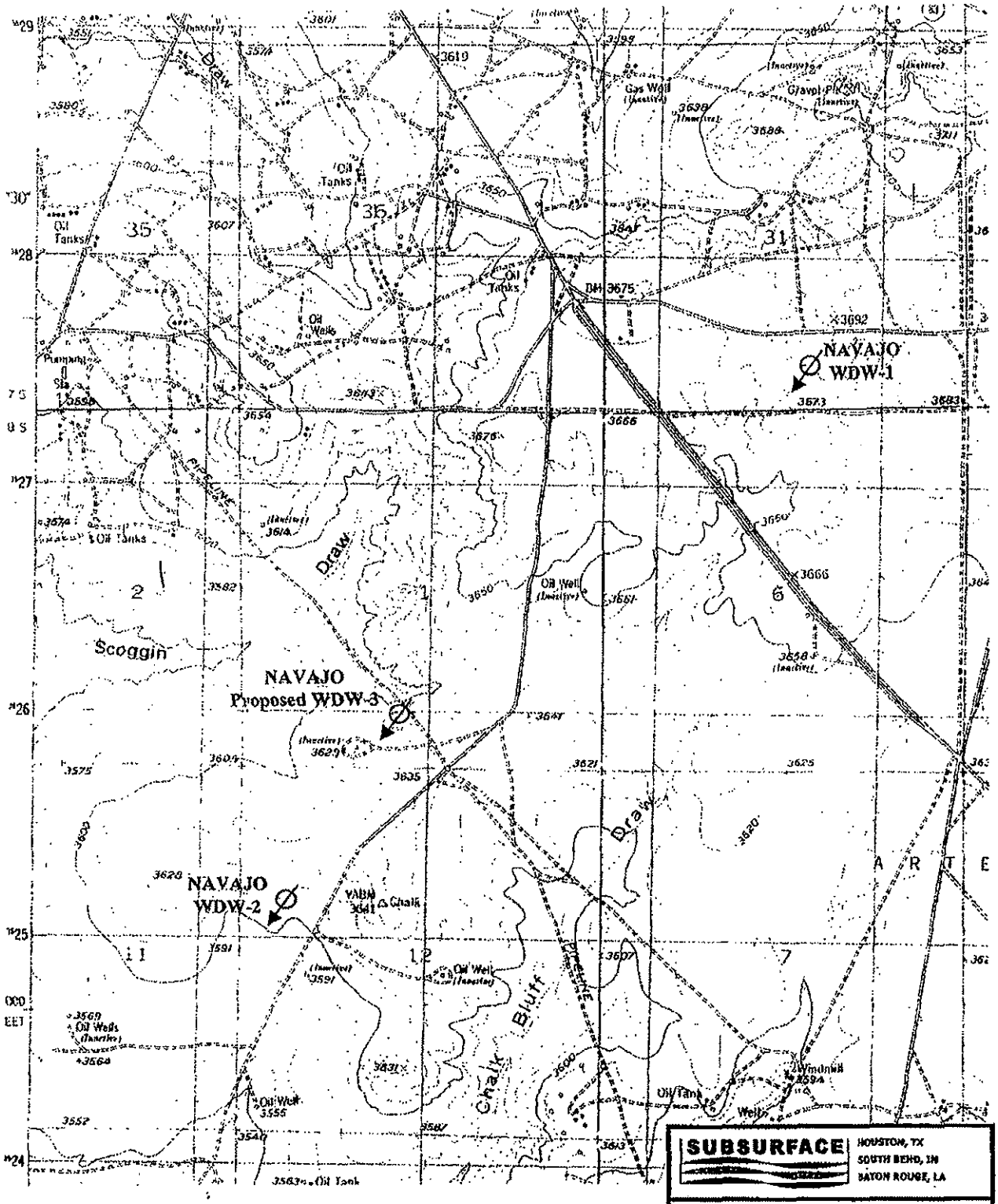
9/17/03
Date

Darrell Moore
Signature

Darrell Moore
Name

Env. Mgr. for Water & Waste
Title

Navajo Refining Company
Company



USGS Topographic Map
Red Lake Quadrangle, Eddy County, NM

Section corners marked with +

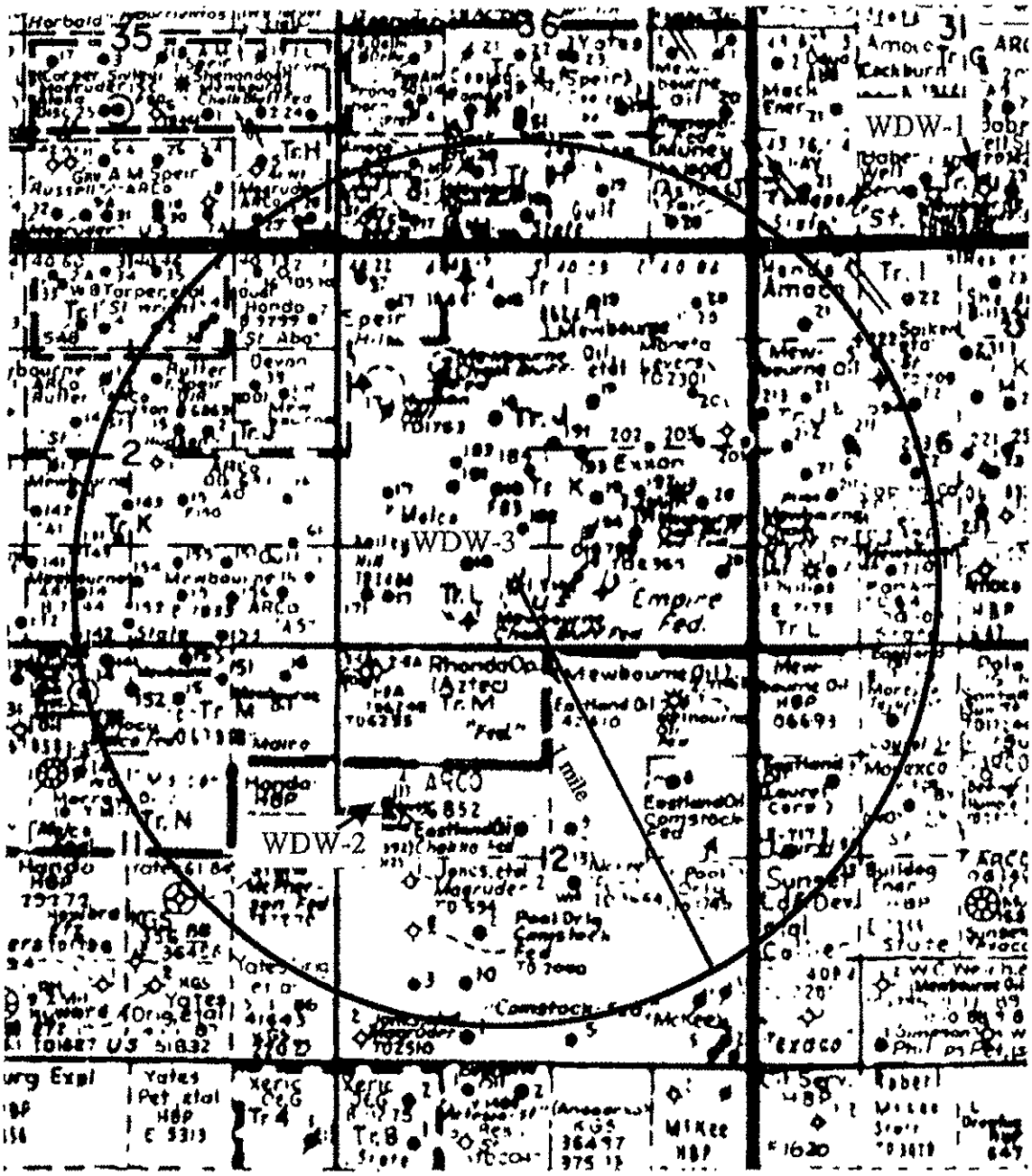
SUBSURFACE
HOUSTON, TX
SOUTH BEND, IN
BATON ROUGE, LA

EXHIBIT A
NAVAJO REFINING COMPANY
PROPOSED WDW-3
790' FSL, 2250' FWL 1-18S-27E

DATE: 7/28/03	APPROVED BY: HLN	JOB NO: 6005497
DRAWN BY:	CHECKED BY:	SCALE: 1"=2000'

T17S - R27E

T17S - R28E



T18S - R27E

EDDY COUNTY, NM

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

EXHIBIT B

WELLS WITHIN 1 MILE OF
NAVAJO REFINING COMPANY
PROPOSED WDW-3

DATED: 7/28/03	APPROVED BY: HLN	JOB NO. 6905407
DRAWN BY:	CHECKED BY:	SCALE: N/A

Map courtesy of Midland Map Company

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

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-103
May 27, 2004

WELL API NO. 30 – 015 - 26575	
5. Indicate Type of Lease STATE X FEE ☐	
6. State Oil & Gas Lease No. NM-0557371	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	7. Lease Name or Unit Agreement Name WDW - 3
1. Type of Well: Oil Well ☐ Gas Well X Other	8. Well Number 3
2. Name of Operator NAVAJO REFINING COMPANY	9. OGRID Number
3. Address of Operator P.O. BOX 159, ARTESIA, NM 88211	10. Pool name or Wildcat

RECEIVED OCD - ARTESIA

4. Well Location
Unit Letter_____: 790 feet from the SOUTH line and 2250 feet from the WEST line
Section 1 Township 18 south Range 27 East NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
GR 3609', RKB 3625'

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type N/A **Depth to Groundwater** 100 FT **Distance from nearest fresh water well** 1 MILE **Distance from nearest surface water** 6 MILES

Pit Liner Thickness: N/A **mil** **Below-Grade Tank: Volume** N/A **bbls; Construction Material** N/A

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
OTHER: To complete a Class 1 non-hazardous waste well		OTHER: Well completion report to follow	X

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

See attached well summary document and well schematic.

MIT Witnessed by Carl Chavez
No Chart Submitted
/g.

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

SIGNATURE Darrell Moore TITLE Env. Mgr. for Water & Waste DATE 1/18/07

Type or print name E-mail address: Telephone No.

For State Use Only

Accepted for record
NMOCD
/g.

APPROVED BY:_____ TITLE_____ DATE_____

Conditions of Approval (if any):

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

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-105
Revised June 10, 2003

WELL API NO.
30 – 015 - 26575

5. Indicate Type of Lease
STATE X FEE ☐

State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:
OIL WELL ☐ GAS WELL ☐ DRY ☐ OTHER Non-hazardous Waste Disposal Well

b. Type of Completion:
NEW WELL ☐ WORK OVER X DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR ☐ OTHER

7. Lease Name or Unit Agreement Name
Waste Disposal Well / WDW - 3

2. Name of Operator
NAVAJO REFINING COMPANY

8. Well No. 3

3. Address of Operator
P.O. BOX 159, ARTESIA, NM 88211

9. Pool name or Wildcat

RECEIVED OCD - ARTESIA

4. Well Location
Unit Letter _____ : 790 Feet From The SOUTH Line and 2250 Feet From The WEST Line

Section 1 Township 18 South Range 27 East NMPM County Eddy, NM

10. Date Spudded	11. Date T.D. Reached	12. Date Compl. (Ready to Prod.)	13. Elevations (DF& RKB, RT, GR, etc.)	14. Elev. Casinghead
12/22/90	1/29/91	Injection 1/15/07	DF 3616 ft / GR 3609 ft	3609 ft

15. Total Depth	16. Plug Back T.D.	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By	Rotary Tools	Cable Tools
10,119 ft	9020 ft	2		(Reentry Drill out CIBP Plugs with Swivel)	

19. Producing Interval(s), of this completion - Top, Bottom, Name
Injection Interval 7660 ft to 8450 ft Cisco & 8540 ft to 8620 ft Canyon

20. Was Directional Survey Made
No

21. Type Electric and Other Logs Run
CBL/VDL, Temperature, Caliper, Radioactive Tracer, Pressure

22. Was Well Cored
No

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

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	54.50	400'	17 ½"	425-CIRC	NONE
9 5/8"	36	2604'	12 ¼"	1025-CIRC	NONE
7"	29 & 26	9450'	8 ¾"	1350-CIRC	NONE

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
4 ½"	9051'	10,119'	175	NONE

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
4 ½"	7567'	7575'

26. Perforation record (interval, size, and number)

7660' TO 8450' / 0.5" / 2 JSPF / 60°
8540' TO 8620' / 0.5" / 2 JSPF / 60°

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

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
7050' TO 7102'	80 SKS PREM 14.8 PPG CMT SQZ PERF
7262' TO 7278'	100 SKS PREM 14.8 PPG CMT SQZ PERF
7304' TO 7314'	80 SKS PREM 14.8 PPG CMT SQZ PERF

28 PRODUCTION

Date First Production	Production Method *(Flowing, gas lift, pumping - Size and type pump)*	Well Status *(Prod. or Shut-in)*
(INJECTION WELL)	(INJECTION PUMP)	(SHUT-IN)

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
10/19/06	4 HOURS	NO CHOKE INJECT TEST	N/A	N/A	N/A	N/A	N/A

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - *(Corr.)*
MAX INJECT 1450 PSI	750 PSI	8 BPM	N/A	N/A	N/A	N/A

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*
NO GAS

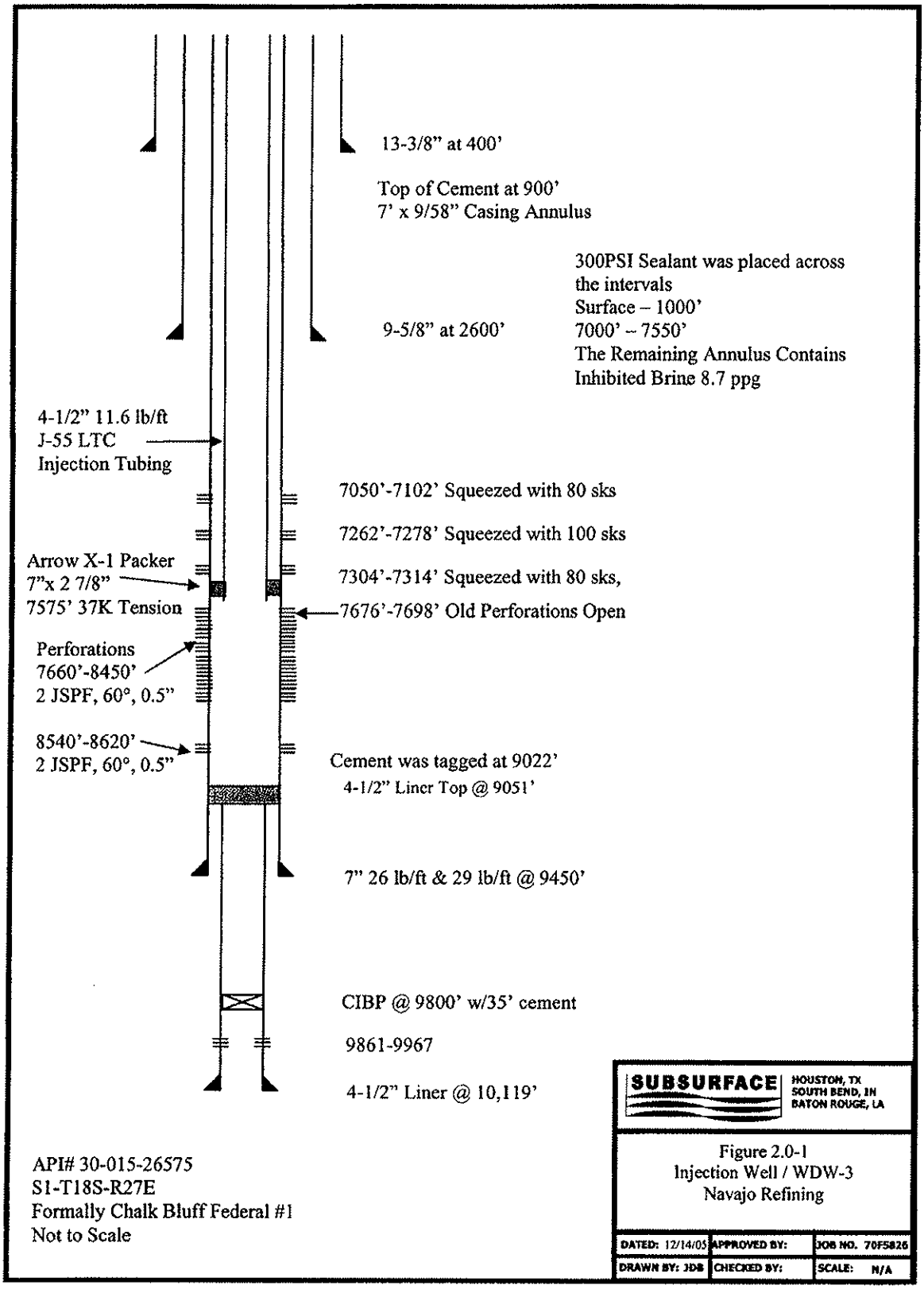
Test Witnessed By

30. List Attachments
WELL SUMMARY OF EVENTS, WELL WAS CONVERTED TO A CLASS 1 NON-HAZARDOUS WATER WASTE DISPOSAL WELL. A FULL REPORT WILL FOLLOW AT A LATER DATE.

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

Signature Darrell Moore Printed Name Darrell Moore Title Env. Mgr. Date 1/8/07

E-mail Address darrell.moore@navajo-refining.com



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

Figure 2.0-1
Injection Well / WDW-3
Navajo Refining

DATED: 12/14/05	APPROVED BY:	JOB NO. 70F5826
DRAWN BY: JDB	CHECKED BY:	SCALE: N/A

Well Summary

Navajo Refining Company (Navajo) contracted Subsurface Technology, Inc. (Subsurface), to prepare an application for permit and to reenter a plugged and abandoned (P&A) oil and gas well. The Application for Permit to Drill or Reenter and the Sundry Notices and Reports on Wells was submitted to the Department of the Interior, Bureau of Land Management (BLM), on June 29, 2006 and approved. The Application for Permit to Drill, Re-enter, Deepen, Plug Back, or add a Zone was submitted to the State of New Mexico Oil Conservation Commission (OCD) on June 29, 2006 and approved.

Subsurface prepared an engineering plan to reenter the P&A'ed oil and gas well formally owned by Mewbourne Oil Company. The original well name was Caulk Bluff Federal #1 (API number 30-015-26575), and a Change of Operator application was submitted to the OCD on December 5, 2000 and approved under the well name of WDW-3. Under contract to Navajo, Subsurface commenced field operations on September 25, 2006. The existing location was cleared and prepared for reentry operations. An earthen lined reserve pit was dug to catch returns. All depths unless stated are referenced to rig floor at six feet to seven feet above ground level. The rig floor was moved from six feet to seven feet after drilling out the cast iron bridge plugs.

A workover rig and reverse unit was placed on location and the existing wellhead was removed. The first cast iron bridge plug (CIBP) at 7010 feet was drilled and the perforated interval from 7050 feet to 7102 feet was squeezed off with neat cement and successfully pressured tested to six hundred eighty pounds per square inch gauge pressure (680 psig). The second and third CIBP at 7190 feet and 7279 feet was drilled. There appeared to be ten feet of cement on top of the third CIBP. The perforated interval from 7262 feet to 7278 feet and from 7304 feet to 7314 feet was squeezed with neat cement. The squeezed interval was pressure tested to 920 psig and would not hold. A second cement squeeze was performed across the perforated interval from 7262 feet to 7278 feet and from 7304 feet to 7314. The interval was pressured tested to 630 psig and continued to lose pressure at a rate of two pounds per square inch every thirty minutes (2 psi/30 min). The fourth CIBP at 7595 feet was drilled and at 7838 feet a cement plug was encountered and drilled through. Cement was tagged twenty nine (29) feet above the top of the liner at 9022 feet. The hole was circulated clean and prepared for logging.

A Cement Bond Log (CBL), Variable Density Log (VDL), caliper log, and temperature survey were performed. The CBL/VDL showed that the top of the cement (TOC) behind the 7-inch casing was located 900 feet from the surface. The OCD was notified and approved the existing well condition. The casing was perforated from 7660 feet to 8450 feet and from 8540 feet to 8620 feet at 2-JSPF on sixty degree (60°) phasing.

A packer was set at 7546 feet with 2 7/8-inch PH-6 tubing, the well was swabbed back and samples of the formation fluid were recovered. It was estimated that two hundred twenty six barrels (226 bbls) of formation fluid was returned to the surface. A pressure test on the annulus between the 7-inch and 2 7/8-inch was performed at 660 psig with the annulus losing pressure at a rate of 8 psi/hr.

An injection test was performed on the well down the 2 7/8-inch tubing with the annulus open to the bottom of the well. The open annulus will allow for the calculation of the bottom hole pressure while pumping down the 2 7/8-inch tubing with out the influence of tubing friction pressure on the bottom hole calculations. The injection rates were from two barrels per minute (2 bpm) to ten barrels per minute (10 bpm). From the data collected during the injection test it appears that the well will be able to accept an injection rate up to 10 bpm at the permitted pressure of 1550 psig with 4 1/2-inch, 11.6 pound per foot (11.6 lb/ft) tubing in the wellbore.

At the request of the OCD, Subsurface went back into the wellbore with a retrievable bridge plug (RBP) to test the casing and isolate any leaks to within 1000 feet. The RBP was set at 7550 feet and the packer was set at 6985 feet to isolate the squeezed interval from 7050 feet to 7314 feet. The squeezed interval was pressure tested to 490 psig and the annulus to 632 psig. The squeezed interval was losing pressure at a rate of 6 psi/hr and the annulus was gaining pressure due to thermal affects. The RBP was moved up the wellbore to 1255 feet and casing pressure tested to 569 psig. The casing above 1255 feet was losing pressure at a rate of 2 psi/hr. The casing leaks were isolated to the squeezed interval from 7050 feet to 7314 feet and in the interval from surface to 1255 feet. The OCD was called and approved the 300PSI sealing application to stop the casing leaks across the two intervals.

The 4 1/2-inch tubing was run into the wellbore and the Arrow X-1 packer was set at 7575.73 feet with 37,000 lbs of tension. Prior to running the 4 1/2-inch tubing a new Superior hanging spool was installed. Prior to setting the tubing packer, the annulus between the 4 1/2-inch tubing and the 7-inch casing was filled with inhibited brine, with the 300psi sealant across the squeezed perforations and across the upper section of the 7-inch casing. Once the packer was set and casing hung off in the spool a new Superior wellhead was installed and the P-seals were pressure tested to 3000 psig. After the wellhead was assembled the annulus was squeezed at 545 psig for four hours (4 hrs) as specified by the sealant manufacture representative on site. The annulus was then pressure tested to 480 psig overnight with no pressure loss. Workover rig was disassembled and moved off location with all associated equipment.

A 12 hr pump in and falloff test was performed down the 4 1/2-inch tubing. To maintain a surface injection pressure that was below the permitted pressure of 1550 psi the injection rate was lowered to 9 bpm at the end of the pump in procedure. The BHP gauge was placed at 8630 feet for 14 hrs to monitor BHP, when the gauge was pulled five minute (5 min) gradient stops were made every 1000 feet with the first stop at 7000 feet. The analysis of the data showed interference from the adjacent injection wells, which skewed the results for determination of the skin and possibly the permeability. The equipment used to perform the falloff testing was moved off location to prepare for mechanical integrity testing (MIT).

The MIT was performed and witnessed by the OCD. The MIT consisted of an annulus pressure test, and a radioactive tracer survey. The temperature survey was performed during the CBL/VDL logging event and will be used as a baseline for any future temperature surveys. The annulus pressure test was performed at 530 psia and lost 2.5 psi over a one hour period, which was within the OCD requirements of five percent (5%)

over a 30 min time interval. The radioactive tracer survey showed no signs of fluid flow out of the permitted interval above 7650 feet. The OCD witnessed the annular pressure test and the first half of the radioactive tracer survey.

The annulus monitoring system was installed and tested. The well was turned over to Navajo for injection.

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Month - Year
FEB 15 2007
OCD - ARTESIA, NM

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☑

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☑

Operator: Navajo Refining Company Telephone: (505) 748-3311 e-mail address: _____
Address: 501 East Main Street Artesia NM 88210
Facility or well name: WDW #3 API #: 30-015-26575 U/L or Qtr/Qtr _____ Sec 1 T 18S R 27E
County: Eddy Latitude _____ Longitude _____ NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal ☑ State ☐ Private ☐ Indian ☐

Pit	Below-grade tank
Type: Drilling ☑ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☑ Unlined ☐ Liner type: Synthetic ☑ Thickness 12 mil Clay ☐ Pit Volume _____ bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) 10 (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) 0
	Ranking Score (Total Points)	10

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☐ offsite ☒ If offsite, name of facility CRI. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☑ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results.
(5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: Navajo Refining Company Plans to close Drilling pit on the WDW #3 As per New Mexico Oil Conservation Division rule 50 in the Pit and Below grade tank Guidelines. Navajo Plans to remove all fluids and Drill cuttings. All cuttings will be taken to a N.M.O.C.D. Approved site for Disposal and Backfill with onsite stockpiled soils. We Will Notify O.C.D 48 hours Prior to Beginning work.

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

Date: 2/14/06
Printed Name/Title Chad Milligan / Agent Signature Chad Milligan

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title Jim W. Gruy District II Supervisor Signature _____ Date: 2/12/07

Form 3160-4
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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

RECEIVED JAN 1 2007 OCD - ARTESIA

1a. Type of Well: [X] Oil Well [ ] Gas Well [ ] Dry [ ] Other
b. Type of Completion: [ ] New Well [✓] Work Over [ ] Deepen [ ] Plug Back [ ] Diff. Resvr.,
Other _____

5. Lease Serial No. NM - 0557371
6. If Indian, Allottee or Tribe Name N/A
7. Unit or CA Agreement Name and No.
8. Lease Name and Well No. WDW - 3
9. AFI Well No. 30 - 015 - 26575
10. Field and Pool, or Exploratory
11. Sec., T., R., M., on Block and Survey or Area SI - T18S - R27E
12. County or Parish EDDY
13. State NM

2. Name of Operator NAVAJO REFINING COMPANY

3. Address P.O. BOX 159, ARTESIA, NM 88211
3a. Phone No. (include area code)

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface 790' FROM THE SOUTH LINE AND 2250' FROM THE WEST LINE
At top prod. interval reported below 7650' AT THE SAME LOCATION AS ABOVE
At total depth PLUG BACK 10,119' AT THE SAME LOCATION AS ABOVE

14. Date Spudded 12/22/1990
15. Date T.D. Reached 01/29/1991
16. Date Completed [ ] D & A [ ] Ready to Prod.
17. Elevations (DF, RKB, RT, GL)* 3609'

18. Total Depth: MD 10,119' TVD 10,119'
19. Plug Back T.D.: MD 9022' TVD 9022'
20. Depth Bridge Plug Set: MD CMT 9051'-9022' TVD CMT 9051'-9022'

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CBL/VDL, MULI-ARM CALIPER, TEMP, RADIOACTIVE TRACER (2006)

22. Was well cored? [✓] No [ ] Yes (Submit analysis)
Was DST run? [✓] No [ ] Yes (Submit report)
Directional Survey? [✓] No [ ] Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17 1/2"	13 3/8"	54.5	SURF	400'	400'	425 CLASS C		SURF	NONE
12 1/4"	9 5/8"	36	SURF	2604'	2604'	1025 "C"		SURF	NONE
8 3/4"	7"	29 & 26	SURF	9450'	9450'	1350 "H"		900'	NONE
6 1/4"	4 1/2"		9051'	10,119'	10,119'	175 CLASS H		9051'-TOL	NONE

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
4 1/2"	7567'	7567'						

25. Producing Intervals

Formation	Top	Bottom
A) CISCO	7650'	8450'
B) CANYON	8540'	8620'
C)		
D)		

26. Perforation Record

Perforated Interval	Size	No. Holes	Perf. Status
7660' - 8450'	0.5"	1580	2 JSPF / 60°
8540'- 8620'	0.5"	160	2 JSPF / 60°

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
7050' - 7102'	80 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATION
7262' - 7278'	100 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATION
7304' - 7314'	80 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATIONS

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									NON-HAZAROUS CLASS I WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
									WAITING ON STATE APPROVAL TO INJECT

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									NON-HAZAROUS CLASS I WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
									WAITING ON STATE APPROVAL TO INJECT

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

28b. Production - Interval C

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

28c. Production - Interval D

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

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

N/A (NON-HAZARDOUS CLASS I WELL)

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth

32. Additional remarks (include plugging procedure):

THE PLUGGED AND ABONDONED WELL WAS AQUIRED FROM MEWBOURNE OIL COMPANY BY NAVAJO REFINING. NAVAJO RECOMPLETED THE WELL FOR INJECTING NON-HAZARDOUS WASTE WATER FROM THEIR REFINERY IN ARTESIA, NM. THE EXISTING PLUGS WERE DRILLED OUT TO THE TOP OF THE LINER PLUG AT 9022' AND THE EXISTING PERFORATIONS WERE SQUEEZED OFF WITH CEMENT AT 7050' TO 7102', 7262' TO 7278', AND FROM 7304' TO 7314'. A 4 1/2" 11.6 #/FT TUBING STRING WAS SET WITH A TENSION PACKER AT 7568' AND BOTTOM OF PACKER AT 7575'. MIT WAS WITNESSED BY OCD.

(SEE ATTACHED WELL SUMMARY FOR MORE DETAILS)

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- [x] Electrical/Mechanical Logs (1 full set req'd.)
- [ ] Geologic Report
- [ ] DST Report
- [ ] Directional Survey
- [x] Sundry Notice for plugging and cement verification
- [ ] Core Analysis
- [ ] Other:

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

Name *(please print)* Darrell Moore Title Env. Mgr for Water & Waste

Signature Darrell Moore Date 1/24/07

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

Form 3160-4
(April 2004)

JAN 1 2007
RECEIVED
OCD - ARTESIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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

5. Lease Serial No. NM - 0557371

1a. Type of Well [X] Oil Well [ ] Gas Well [ ] Dry [ ] Other
b. Type of Completion: [ ] New Well [✓] Work Over [ ] Deepen [ ] Plug Back [ ] Diff. Resvr.,
Other _____

6. If Indian, Allottee or Tribe Name N/A

7. Unit or CA Agreement Name and No.

2. Name of Operator NAVAJO REFINING COMPANY

8. Lease Name and Well No. WDW - 3

3. Address P.O. BOX 159, ARTESIA, NM 88211

3a. Phone No. (include area code)

9. AFI Well No. 30 - 015 - 26575

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface 790' FROM THE SOUTH LINE AND 2250' FROM THE WEST LINE

At top prod. interval reported below 7650' AT THE SAME LOCATION AS ABOVE

At total depth PLUG BACK 10,119' AT THE SAME LOCATION AS ABOVE

10. Field and Pool, or Exploratory

11. Sec., T., R., M., on Block and Survey or Area S1 - T18S - R27E

12. County or Parish EDDY

13. State NM

14. Date Spudded 12/22/1990

15. Date T.D. Reached 01/29/1991

16. Date Completed [ ] D & A [ ] Ready to Prod.

17. Elevations (DF, RKB, RT, GL)* 3609'

18. Total Depth: MD 10,119' TVD 10,119'

19. Plug Back T.D.: MD 9022' TVD 9022'

20. Depth Bridge Plug Set: MD CMT 9051'-9022' TVD CMT 9051'-9022'

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CBL/VDL, MULI-ARM CALIPER, TEMP, RADIOACTIVE TRACER (2006)

22. Was well cored? [✓] No [ ] Yes (Submit analysis)
Was DST run? [✓] No [ ] Yes (Submit report)
Directional Survey? [✓] No [ ] Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17 1/2"	13 3/8"	54.5	SURF	400'	400'	425 CLASS C		SURF	NONE
12 1/4"	9 5/8"	36	SURF	2604'	2604'	1025 "C"		SURF	NONE
8 3/4"	7"	29 & 26	SURF	9450'	9450'	1350 "H"		900'	NONE
6 1/4"	4 1/2"		9051'	10,119'	10,119'	175 CLASS H		9051'-TOL	NONE

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
4 1/2"	7567'	7567'						

25. Producing Intervals

Formation	Top	Bottom
A) CISCO	7650'	8450'
B) CANYON	8540'	8620'
C)		
D)		

26. Perforation Record

Perforated Interval	Size	No. Holes	Perf. Status
7660' - 8450'	0.5"	1580	2 JSPF / 60°
8540'- 8620'	0.5"	160	2 JSPF / 60°

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
7050' - 7102'	80 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATION
7262' - 7278'	100 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATION
7364' - 7314'	80 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATIONS

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									NON-HAZAROUS CLASS I WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
									WAITING ON STATE APPROVAL TO INJECT

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									NON-HAZAROUS CLASS I WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
									WAITING ON STATE APPROVAL TO INJECT

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

28b. Production - Interval C

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

28c. Production - Interval D

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

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

N/A (NON-HAZARDOUS CLASS I WELL)

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth

32. Additional remarks (include plugging procedure):

THE PLUGGED AND ABONDONED WELL WAS AQUIRED FROM MEWBOURNE OIL COMPANY BY NAVAJO REFINING. NAVAJO RECOMPLETED THE WELL FOR INJECTING NON-HAZARDOUS WASTE WATER FROM THEIR REFINERY IN ARTESIA, NM. THE EXISTING PLUGS WERE DRILLED OUT TO THE TOP OF THE LINER PLUG AT 9022' AND THE EXISTING PERFORATIONS WERE SQUEEZED OFF WITH CEMENT AT 7050' TO 7102', 7262' TO 7278', AND FROM 7304' TO 7314'. A 4 1/2" 11.6 #/FT TUBING STRING WAS SET WITH A TENSION PACKER AT 7568' AND BOTTOM OF PACKER AT 7575'. MIT WAS WITNESSED BY OCD.

(SEE ATTACHED WELL SUMMARY FOR MORE DETAILS)

33. Indicate which itmes have been attached by placing a check in the appropriate boxes:

- [x] Electrical/Mechanical Logs (1 full set req'd.)
- [ ] Geologic Report
- [ ] DST Report
- [ ] Directional Survey
- [x] Sundry Notice for plugging and cement verification
- [ ] Core Analysis
- [ ] Other:

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

Name *(please print)* Darrell Moore Title Env. Mgr for Water & Waste

Signature Darrell Moore Date 1/24/07

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

OCD-ARTESIA

Form 3160-5
(April 2004)

Month - Year
MAR - 5 2007
OCD - ARTESIA, NM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE- *Other instructions on reverse side.*

5. Lease Serial No.
NM-0557371

6. If Indian, Allottee or Tribe Name
N/A

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

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

8. Well Name and No.
WDW-3

2. Name of Operator
NAVAJO REFINIG COMPANY

9. API Well No.
30 - 015 - 26575

3a. Address
P.O. BOX 159, ARTESIA, NM 88211

3b. Phone No. *(include area code)*

10. Field and Pool, or Exploratory Area

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
S1 - T18S - R27E ; 790' FROM THE SOUTH LINE AND 2250' FROM THE WEST LINE

11. County or Parish, State
EDDY

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

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

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

THE PLUGGED AND ABONDONED WELL WAS AQUIRED FROM MEWBOURNE OIL COMPANY BY NAVAJO REFINING. NAVAJO RECOMPLETED THE WELL FOR INJECTING NON-HAZARDOUS WASTE WATER FROM THEIR REFINERY IN ARTESIA, NM.

10/1/06 -THE EXISTING PLUGS WERE DRILLED OUT TO THE TOP OF THE LINER PLUG AT 9022' AND THE EXISTING PERFORATIONS WERE SQUEEZED OFF WITH NEAT CEMENT AT 7050' TO 7102', 7262' TO 7278', AND FROM 7304' TO 7314'.

10/13/06 - RAN CBL/VDL AND TEMPERATURE SURVEY, PERFORATED INTERVAL FROM 7650' TO 8450' AND FROM 8540' TO 8620'.

10/24/06 - A 4 1/2" 11.6 #/FT TUBING STRING WAS SET WITH A TENSION PACKER AT 7568' AND BOTTOM OF PACKER AT 7575'.

11/4/06 - PERFROMED AN INJECTION/FALLOFF TEST ON THE WELL AT 9 TO 10 BPM.

11/15/06 - MECHANICALLY INTEGRITY TEST WERE PERFORMED AND WITNESSED BY THE OCD. THE MECHANICALLY INTEGRITY TEST CONSISTED OF RADIOACTIVE TRACER TEST AND AN ANNULUS PRESSURE TEST. (SEE THE ATTACHED WELL SUMMARY FOR MORE DETAILS.)

SUBJECT TO LIKE APPROVAL BY STATE

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)* Darrell Moore — Title Env. Mgr. for Water + Waste
Signature Darrell Moore — Date 1/24/07

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

ACCEPTED FOR RECORD

Approved by _____ Title _____ Date FEB 28 2007

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

FREDERICK WRIGHT
PETROLEUM ENGINEER

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

(Instructions on page 2)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

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

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3 - 4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

This information is being collected to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer, (WO-630), Mail Stop 401 LS, 1849 C St., N.W., Washington D.C. 20240

SUNDRY NOTICE SPECIAL STIPULATIONS

1. **Approval is granted for the water disposal method presented in the sundry subject to the following conditions:**

2. The operator must provide a water analysis of the water to be injected, together with a copy of the disposal permit granted by the state.

****** Approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.**

Engineering
can be reached at 505-706-2779 for any variances that might be necessary.

F Wright 2/28/07

OCD-ARTESIA

Form 3160-4
(April 2004)

Month - Year
7 - 5 2007
ARTESIA, NM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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

5. Lease Serial No. NM - 0557371

6. If Indian, Allottee or Tribe Name N/A

7. Unit or CA Agreement Name and No.

8. Lease Name and Well No. WDW - 3

9. API Well No. 30 - 015 - 26575

10. Field and Pool, or Exploratory

11. Sec., T., R., M., on Block and Survey or Area S1 - T18S - R27E

12. County or Parish EDDY

13. State NM

1a. Type of Well [ ] Oil Well [ ] Gas Well [ ] Dry [ ] Other

b. Type of Completion: [ ] New Well [✓] Work Over [ ] Deepen [ ] Plug Back [ ] Diff. Resvr, .
Other _____

2. Name of Operator NAVAJO REFINING COMPANY

3. Address P.O. BOX 159, ARTESIA, NM 88211

3a. Phone No. (include area code)

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface 790' FROM THE SOUTH LINE AND 2250' FROM THE WEST LINE

At top prod. interval reported below 7650' AT THE SAME LOCATION AS ABOVE

At total depth PLUG BACK 10,119' AT THE SAME LOCATION AS ABOVE

14. Date Spudded 12/22/1990

15. Date T.D. Reached 01/29/1991

16. Date Completed [ ] D & A [ ] Ready to Prod.

17. Elevations (DF, RKB, RT, GL)* 3609'

18. Total Depth: MD 10,119' TVD 10,119'

19. Plug Back T.D.: MD 9022' TVD 9022'

20. Depth Bridge Plug Set: MD CMT 9051'-9022' TVD CMT 9051'-9022'

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CBL/VDL, MULI-ARM CALIPER, TEMP, RADIOACTIVE TRACER (2006)

22. Was well cored? [✓] No [ ] Yes (Submit analysis)
Was DST run? [✓] No [ ] Yes (Submit report)
Directional Survey? [✓] No [ ] Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17 1/2"	13 3/8"	54.5	SURF	400'	400'	425 CLASS C		SURF	NONE
12 1/4"	9 5/8"	36	SURF	2604'	2604'	1025 "C"		SURF	NONE
8 3/4"	7"	29 & 26	SURF	9450'	9450'	1350 "H"		900'	NONE
6 1/4"	4 1/2"		9051'	10,119'	10,119'	175 CLASS H		9051'-TOL	NONE

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
4 1/2"	7567'	7567'						

25. Producing Intervals

Formation	Top	Bottom
A) CISCO	7650'	8450'
B) CANYON	8540'	8620'
C)		
D)		

26. Perforation Record

Perforated Interval	Size	No. Holes	Perf. Status
7660' - 8450'	0.5"	1580	2 JSPF / 60°
8540'- 8620'	0.5"	160	2 JSPF / 60°

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
7050' - 7102'	80 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATION
7262' - 7278'	100 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATION
7304' - 7314'	80 SKS PREM 14.8 PPG NEAT CMT FOR PERF SQZ ON PREVIOUS PERFORATIONS

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									NON-HAZAROUS CLASS I WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
									WAITING ON STATE APPROVAL TO INJECT

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
									NON-HAZAROUS CLASS I WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
									WAITING ON STATE APPROVAL TO INJECT

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

ACCEPTED FOR RECORD
FEB 28 2007
FREDERICK WRIGHT
PETROLEUM ENGINEER

28b. Production - Interval C

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

28c. Production - Interval D

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

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

N/A (NON-HAZARDOUS CLASS I WELL)

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth

32. Additional remarks (include plugging procedure):

THE PLUGGED AND ABONDONED WELL WAS AQUIRED FROM MEWBOURNE OIL COMPANY BY NAVAJO REFINING. NAVAJO RECOMPLETED THE WELL FOR INJECTING NON-HAZARDOUS WASTE WATER FROM THEIR REFINERY IN ARTESIA, NM. THE EXISTING PLUGS WERE DRILLED OUT TO THE TOP OF THE LINER PLUG AT 9022' AND THE EXISTING PERFORATIONS WERE SQUEEZED OFF WITH CEMENT AT 7050' TO 7102', 7262' TO 7278', AND FROM 7304' TO 7314'. A 4 1/2" 11.6 #/FT TUBING STRING WAS SET WITH A TENSION PACKER AT 7568' AND BOTTOM OF PACKER AT 7575'. MIT WAS WITNESSED BY OCD.

(SEE ATTACHED WELL SUMMARY FOR MORE DETAILS)

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- [x] Electrical/Mechanical Logs (1 full set req'd.)
- [ ] Geologic Report
- [ ] DST Report
- [ ] Directional Survey
- [x] Sundry Notice for plugging and cement verification
- [ ] Core Analysis
- [ ] Other:

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

Name *(please print)* Darrell Moore Title Env. Mgr for Water & Waste

Signature Darrell Moore Date 1/24/07

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

INSTRUCTIONS

GENERAL: This form is designed for submitting a complete and correct well completion/recompletion report and log on all types of wells on Federal and Indian leases to a Federal agency, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal office.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, and all types electric), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal laws and regulations. All attachments should be listed on this form, see item 33.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal office for specific instructions.

ITEM 17: Indicate which reported elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

ITEM 23: Show how reported top(s) of cement were determined, i.e. circulated (CIR), or calculated (CAL), or cement bond log (CBL), or temperature survey (TS).

PRIVACY ACT

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

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. et seq.; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is to be used to evaluate the actual operations performed in the drilling, completing and testing of a well on a Federal or Indian lease.

ROUTINE USES: (1) Evaluate the equipment and procedures used during the drilling and completing/recompleting of a well. (2) The review of geologic zones and formation encountered during drilling. (3) Analyze future applications to drill in light of data obtained and methods used. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this report and disclosure of the information is mandatory once a well drilled on a Federal or Indian lease is completed/recompleted.

The Paperwork Reduction Act of 1995 requires us to inform you that:

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

This information will be used to analyze operations and to compare equipment and procedures actually used with those proposed and approved.

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

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 60 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer, (WO-630), MS 401 LS, 1849 C Street, N.W., Washington, D.C. 20240.

Well Summary

Navajo Refining Company (Navajo) contracted Subsurface Technology, Inc. (Subsurface), to prepare an application for permit and to reenter a plugged and abandoned (P&A) oil and gas well. The Application for Permit to Drill or Reenter and the Sundry Notices and Reports on Wells was submitted to the Department of the Interior, Bureau of Land Management (BLM), on June 29, 2006 and approved. The Application for Permit to Drill, Re-enter, Deepen, Plug Back, or add a Zone was submitted to the State of New Mexico Oil Conservation Commission (OCD) on June 29, 2006 and approved.

Subsurface prepared an engineering plan to reenter the P&A'ed oil and gas well formally owned by Mewbourne Oil Company. The original well name was Caulk Bluff Federal #1 (API number 30-015-26575), and a Change of Operator application was submitted to the OCD on December 5, 2000 and approved under the well name of WDW-3. Under contract to Navajo, Subsurface commenced field operations on September 25, 2006. The existing location was cleared and prepared for reentry operations. An earthen lined reserve pit was dug to catch returns. All depths unless stated are referenced to rig floor at six feet to seven feet above ground level. The rig floor was moved from six feet to seven feet after drilling out the cast iron bridge plugs.

A workover rig and reverse unit was placed on location and the existing wellhead was removed. The first cast iron bridge plug (CIBP) at 7010 feet was drilled and the perforated interval from 7050 feet to 7102 feet was squeezed off with neat cement and successfully pressured tested to six hundred eighty pounds per square inch gauge pressure (680 psig). The second and third CIBP at 7190 feet and 7279 feet was drilled. There appeared to be ten feet of cement on top of the third CIBP. The perforated interval from 7262 feet to 7278 feet and from 7304 feet to 7314 feet was squeezed with neat cement. The squeezed interval was pressure tested to 920 psig and would not hold. A second cement squeeze was performed across the perforated interval from 7262 feet to 7278 feet and from 7304 feet to 7314. The interval was pressured tested to 630 psig and continued to lose pressure at a rate of two pounds per square inch every thirty minutes (2 psi/30 min). The fourth CIBP at 7595 feet was drilled and at 7838 feet a cement plug was encountered and drilled through. Cement was tagged twenty nine (29) feet above the top of the liner at 9022 feet. The hole was circulated clean and prepared for logging.

A Cement Bond Log (CBL), Variable Density Log (VDL), caliper log, and temperature survey were performed. The CBL/VDL showed that the top of the cement (TOC) behind the 7-inch casing was located 900 feet from the surface. The OCD was notified and approved the existing well condition. The casing was perforated from 7660 feet to 8450 feet and from 8540 feet to 8620 feet at 2-JSPF on sixty degree (60°) phasing.

A packer was set at 7546 feet with 2 7/8-inch PH-6 tubing, the well was swabbed back and samples of the formation fluid were recovered. It was estimated that two hundred twenty six barrels (226 bbls) of formation fluid was returned to the surface. A pressure test on the annulus between the 7-inch and 2 7/8-inch was performed at 660 psig with the annulus losing pressure at a rate of 8 psi/hr.

An injection test was performed on the well down the 2 7/8-inch tubing with the annulus open to the bottom of the well. The open annulus will allow for the calculation of the bottom hole pressure while pumping down the 2 7/8-inch tubing with out the influence of tubing friction pressure on the bottom hole calculations. The injection rates were from two barrels per minute (2 bpm) to ten barrels per minute (10 bpm). From the data collected during the injection test it appears that the well will be able to accept an injection rate up to 10 bpm at the permitted pressure of 1550 psig with 4 1/2-inch, 11.6 pound per foot (11.6 lb/ft) tubing in the wellbore.

At the request of the OCD, Subsurface went back into the wellbore with a retrievable bridge plug (RBP) to test the casing and isolate any leaks to within 1000 feet. The RBP was set at 7550 feet and the packer was set at 6985 feet to isolate the squeezed interval from 7050 feet to 7314 feet. The squeezed interval was pressure tested to 490 psig and the annulus to 632 psig. The squeezed interval was losing pressure at a rate of 6 psi/hr and the annulus was gaining pressure due to thermal affects. The RBP was moved up the wellbore to 1255 feet and casing pressure tested to 569 psig. The casing above 1255 feet was losing pressure at a rate of 2 psi/hr. The casing leaks were isolated to the squeezed interval from 7050 feet to 7314 feet and in the interval from surface to 1255 feet. The OCD was called and approved the 300PSI sealing application to stop the casing leaks across the two intervals.

The 4 1/2-inch tubing was run into the wellbore and the Arrow X-1 packer was set at 7575.73 feet with 37,000 lbs of tension. Prior to running the 4 1/2-inch tubing a new Superior hanging spool was installed. Prior to setting the tubing packer, the annulus between the 4 1/2-inch tubing and the 7-inch casing was filled with inhibited brine, with the 300psi sealant across the squeezed perforations and across the upper section of the 7-inch casing. Once the packer was set and casing hung off in the spool a new Superior wellhead was installed and the P-seals were pressure tested to 3000 psig. After the wellhead was assembled the annulus was squeezed at 545 psig for four hours (4 hrs) as specified by the sealant manufacture representative on site. The annulus was then pressure tested to 480 psig overnight with no pressure loss. Workover rig was disassembled and moved off location with all associated equipment.

A 12 hr pump in and falloff test was performed down the 4 1/2-inch tubing. To maintain a surface injection pressure that was below the permitted pressure of 1550 psi the injection rate was lowered to 9 bpm at the end of the pump in procedure. The BHP gauge was placed at 8630 feet for 14 hrs to monitor BHP, when the gauge was pulled five minute (5 min) gradient stops were made every 1000 feet with the first stop at 7000 feet. The analysis of the data showed interference from the adjacent injection wells, which skewed the results for determination of the skin and possibly the permeability. The equipment used to perform the falloff testing was moved off location to prepare for mechanical integrity testing (MIT).

The MIT was performed and witnessed by the OCD. The MIT consisted of an annulus pressure test, and a radioactive tracer survey. The temperature survey was performed during the CBL/VDL logging event and will be used as a baseline for any future temperature surveys. The annulus pressure test was performed at 530 psia and lost 2.5 psi over a one hour period, which was within the OCD requirements of five percent (5%)

over a 30 min time interval. The radioactive tracer survey showed no signs of fluid flow out of the permitted interval above 7650 feet. The OCD witnessed the annular pressure test and the first half of the radioactive tracer survey.

The annulus monitoring system was installed and tested. The well was turned over to Navajo for injection.

LOGGING SERVICES

R/A TRACER LOG INTERPRETATION

11/27/2006

PLANT: NAVAJO REFINING CO.
C/O: SUBSURFACE TECHNOLOGY
WELL NAME: CHALK BLUFF FEDERAL # 1 WDW # 3

RE: Radioactive Tubing & Packer Survey ran on 11/18/2006

A Pre Base Log was run from 9020' to 7350' to detect and record background gamma counts.

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

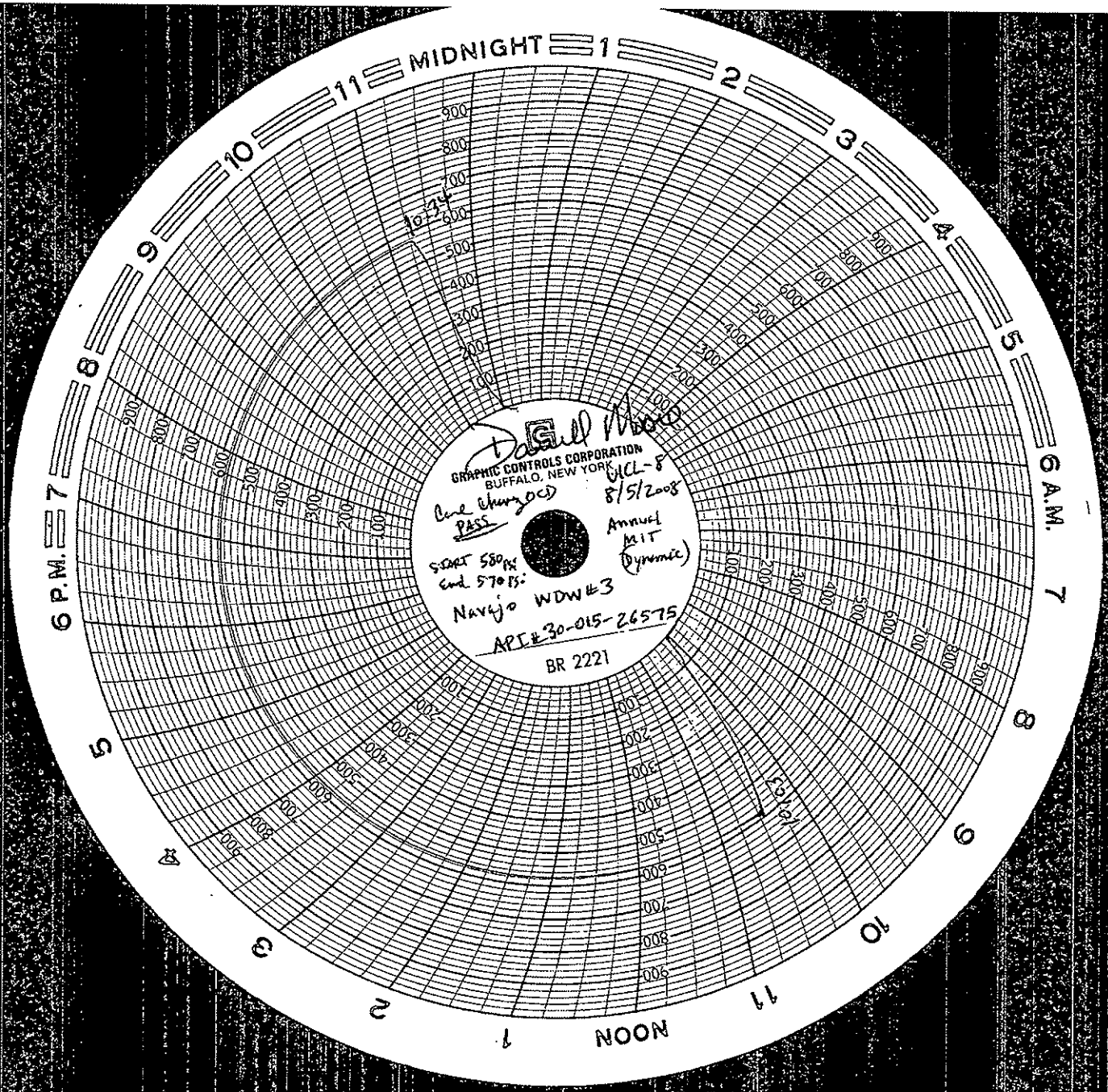
The flow profile log was then repeated and this survey also showed R/A material going out into the permitted interval.

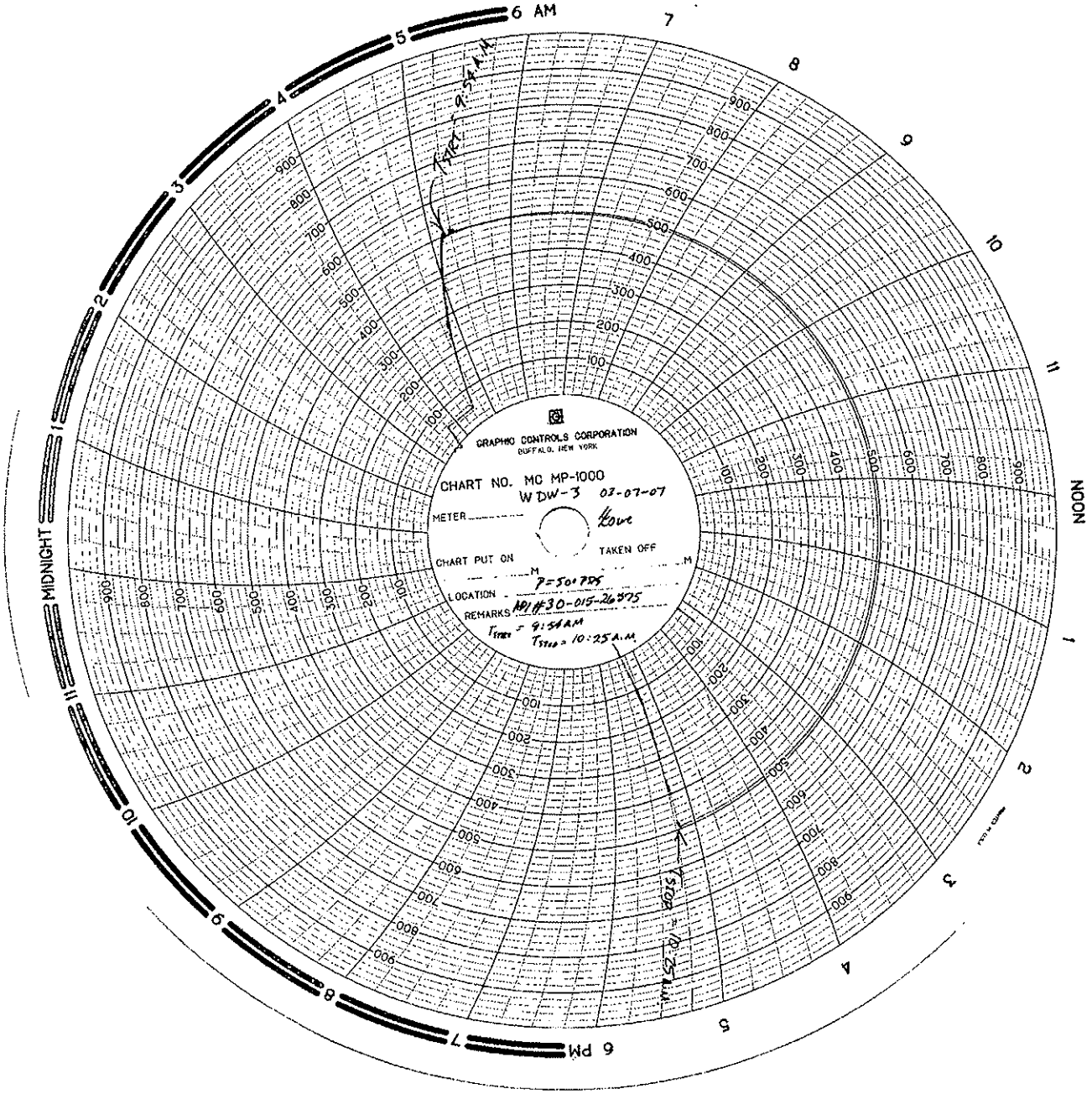
Two Stationary Time Drive surveys were run with the tool at 7640'. No indications of upward migration were recorded.

A Post Base log was then run from 9016' to 7342' and noted that all R/A material was flushed out of the wellbore into the permitted interval.

John Croce

John Croce


MIDNIGHT
NOON
6 A.M.
6 P.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
Line Change OCD
PASS
Start 580 PSI
End 570 PSI
Navajo WDW #3
API # 30-015-26575
BR 2221
UCL-8
8/5/2008
Annual MIT (Dynamic)


6 AM
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GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
CHART NO. MC MP-1000
WDW-3 03-07-07
METER
Love
CHART PUT ON
TAKEN OFF
LOCATION
REMARKS
API #30-015-26575
T_{start} = 9:54 AM
T_{stop} = 10:25 A.M.
Start 9:54 AM
Stop 10:25 AM

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

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of Test June 30, 2010 Operator Navajo Refining API #30-015-26575

Property Name WDW Well No. 3 Location: Unit O Section 1 Township 18S Range 27E

Well Status ~~(Shut-In or Producing)~~ Injecting Tubing____ Intermediate____ Casing____ Bradenhead____

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

TIME	PRESSURES: BRADENHEAD	INTERMEDIATE	CASING
5 minutes	0	0	
10 minutes	N/A	N/A	
15 minutes	N/A	N/A	
20 minutes	N/A	N/A	
25 minutes	N/A	N/A	
30 minutes	N/A	N/A	

	BRADENHEAD FLOWED	INTERMEDIATE FLOWED
Steady Flow	N/A	N/A
Surges	N/A	N/A
Down to Nothing	immediately	immediately
Nothing	X	X
Gas	N/A	N/A
Gas & Water	N/A	N/A
Water	N/A	N/A

If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR____ FRESH____ SALTY____ SULFUR____ BLACK____

5 MINUTE SHUT-IN BRADENHEAD 0 INTERMEDIATE 0

REMARKS:
Both the surface and intermediate bradenheads were opened one at a time. Both had a puff of air upon opening the valve (from heat build-up) and then nothing. No flow. No pressure.

By Darrell Moore Darrell Moore Witness

Env. Mgr. for Water & Waste Navajo Refining
(Position)

E-mail address darrell.moore@hollycorp.com

NOON
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GRAPHIC CONTROLS CORPORATION
BUFFALO NEW YORK
Navajo Refining
MPU-3 Sec 18 T21N
4/26/10
BR 2221

Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Friday, March 05, 2010 8:51 AM
To: Chavez, Carl J, EMNRD
Subject: WDW-3 Qtrl MIT

Carl

Attached, please find the chart for the MIT we did on our WDW-3 on February 24, 2010. We also opened the did a bradenhead test and there was no sustained pressure. There was a slight puff but it dissipated quickly and can be attributed to temperature changes.

If there are any questions concerning this submission, please call me at 575-746-5281.

Darrell Moore

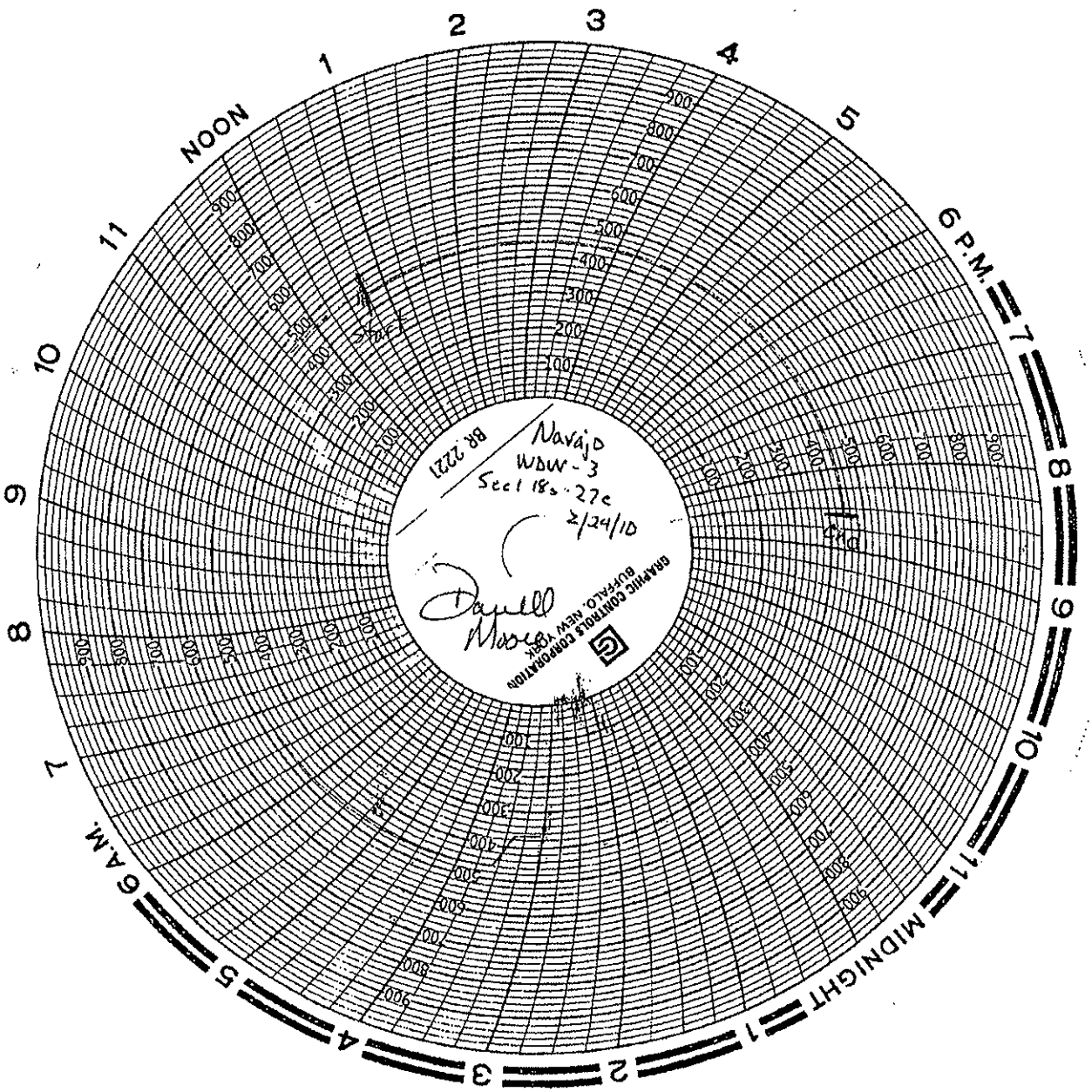
Environmental Manager for Water and Waste

Navajo Refining Company, LLC

Phone Number 575-746-5281

Cell Number 575-703-5058

Fax Number 575-746-5451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Navajo
WDW-3
Sec 1 18s-27e
2/24/10
BR 2221
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, July 06, 2010 9:04 AM
To: 'Moore, Darrell'
Subject: RE: Sewer Testing

Darrell:

Thanks for the notification.

Also, the OCD needs Navajo to complete the quarterly Bradenhead information on the form provided to you last week for our records. Let me know if you have any questions. Staff in Artesia questioned the 30 minutes in the form, and I determine that Navajo just needs to use the form to document compliance with our quarterly Bradenhead testing requirement for WDW-3. The MITs for Class I Wells need to be completed by 9/30/2010 along with Annual Fall-Off Test. OCD can use the MIT pressure chart for WDW-3 to satisfy the MIT requirement this season.

Please contact me if you have questions. Thanks.

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

From: Moore, Darrell [mailto:Darrell.Moore@hollycorp.com]
Sent: Tuesday, July 06, 2010 7:24 AM
To: Chavez, Carl J, EMNRD
Subject: Sewer Testing

Carl

We will be testing sewers in the Vacuum Unit at the Artesia Refinery on Friday July 9, 2010 starting at 8 am. If OCD would like to witness let me know.

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

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

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of Test June 30, 2010 Operator Navajo Refining API #30-015-26575

Property Name WDW Well No. 3 Location: Unit O Section 1 Township 18S Range 27E

Well Status ~~(Shut-In or Producing)~~ Injecting Tubing ____ Intermediate ____ Casing ____ Bradenhead ____

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

TIME	PRESSURES: BRADENHEAD	INTERMEDIATE	CASING
5 minutes	0	0	
10 minutes	N/A	N/A	
15 minutes	N/A	N/A	
20 minutes	N/A	N/A	
25 minutes	N/A	N/A	
30 minutes	N/A	N/A	

	BRADENHEAD FLOWED	INTERMEDIATE FLOWED
Steady Flow	N/A	N/A
Surges	N/A	N/A
Down to Nothing	immediately	immediately
Nothing	X	X
Gas	N/A	N/A
Gas & Water	N/A	N/A
Water	N/A	N/A

If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR ____ FRESH ____ SALTY ____ SULFUR ____ BLACK ____

5 MINUTE SHUT-IN BRADENHEAD 0 INTERMEDIATE 0

REMARKS:
Both the surface and intermediate bradenheads were opened one at a time. Both had a puff of air upon opening the valve (from heat build-up) and then nothing. No flow. No pressure.

By Darrell Moore Darrell Moore Witness ____

Env. Mgr. for Water & Waste Navajo Refining
(Position)

E-mail address darrell.moore@hollycorp.com

Chavez, Carl J, EMNRD

From: Moore, Darrell [Darrell.Moore@hollycorp.com]
Sent: Wednesday, June 30, 2010 1:47 PM
To: Chavez, Carl J, EMNRD; Dade, Randy, EMNRD
Subject: FW:
Attachments: WDW-3.pdf

Gentlemen,

Attached, please find the quarterly MIT for Navajo's WDW-3 Injection well located in Sec 1, 18 south 27 east. If there are any questions concerning this submission, please call me at 575-746-5281.

From: Hernandez, Carrie
Sent: Wednesday, June 30, 2010 1:44 PM
To: Moore, Darrell
Subject:

Carrie Hernandez
Environmental Administrative Assistant
Navajo Refining Co. LLC
Direct Line 575-748-6733
Direct Fax 575-746-5451
Life is a Journey. Roll down the Windows and Enjoy the Breeze

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GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
Navajo Refining
WDW-3 Sec 1 R3 22E
4/26/10
BR 2221

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

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-103
Revised August 1, 2011

WELL API NO. **30-015-26575**

5. Indicate Type of Lease STATE ☒ FEE ☐

6. State Oil & Gas Lease No. **NM-0557371**

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

7. Lease Name or Unit Agreement Name **Gaines WDW-3**

1. Type of Well: Oil Well ☐ Gas Well ☐ Other **Injection Well**

8. Well Number **WDW-3**

2. Name of Operator **Navajo Refining Company**

9. OGRID Number

3. Address of Operator **Post Office Box 159, Artesia, New Mexico 88211**

10. Pool name or Wildcat: **Navajo Permo-Penn**

4. Well Location
Unit Letter **N** : **790** feet from the **South** line and **2250** feet from the **West** line
Section **01** Township **18S** Range **27E** NMPM County **Eddy**

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* **3609' GL, ' RKB**

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: **PERFORM PRESSURE FALLOFF TEST** ☒		OTHER: ☐	

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

December 12, 2011 –Install bottomhole gauges into WDW-1, WDW-2, and WDW-3 by 11:45am. Continue injection into all three wells.
December 13, 2011 – Continue injection into all three wells.
December 14, 2011 – At 12:15pm, the offset wells WDW-1 and WDW-2 will be shut-in. A constant injection rate will be established for WDW-3 and continue for a 30 hour injection period. Do not exceed 1000 psig wellhead pressure.
December 15, 2011 – At 7:00pm, WDW-3 will be shut in for a 30-hour falloff period. WDW-1 and WDW-2 will remain shut-in.
December 16, 2011 – All three wells will continue to be shut in while monitoring falloff pressure in all three wells.
December 17, 2011 – At 7:00am, acquire downhole pressure gauges from all three wells. Tag bottom of fill and come out of hole very slowly, making 7-minute gradient stops while coming out of WDW-3 every 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 ft, 3000 ft, 2000 ft, 1000 ft, surface). Run in hole with a temperature tool and conduct temperature survey from the surface to the top of the fill. Turn the wells back to Navajo personnel.

Spud Date: Rig Release Date:

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

SIGNATURE Timothy Jones TITLE Project Engineer DATE 10/3/2011

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

For State Use Only

APPROVED BY: Carl J. Chaney TITLE Environmental Engineer DATE 10/19/2011

Conditions of Approval (if any): See E-mail conditions dated 10/19/2011 attached to WDW-1.

Chavez, Carl J, EMNRD

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

Darrell:

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

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

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

Comments:

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

Observations:

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

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

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

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

Recommendations:

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

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

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/
Why not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward with the Rest of the Nation?" To see how, go to "Pollution Prevention & Waste Minimization" at:
http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental)

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N French Dr, Hobbs, NM 88240
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811 S First St, Artesia, NM 88210
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1220 S St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-103
Revised August 1, 2011

WELL API NO. **30-015-26575**

5. Indicate Type of Lease STATE ☒ FEE ☐

6. State Oil & Gas Lease No. **NM-0557371**

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

7. Lease Name or Unit Agreement Name **Gaines WDW-3**

1. Type of Well: Oil Well ☐ Gas Well ☐ Other **Injection Well**

8. Well Number **WDW-3**

2. Name of Operator **Navajo Refining Company**

9. OGRID Number

3. Address of Operator **Post Office Box 159, Artesia, New Mexico 88211**

10. Pool name or Wildcat: **Navajo Permo-Penn**

4. Well Location
Unit Letter **N** : **790** feet from the **South** line and **2250** feet from the **West** line
Section **01** Township **18S** Range **27E** NMPM County **Eddy**

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* **3609' GL, ' RKB**

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: **PERFORM PRESSURE FALLOFF TEST** ☒		OTHER: ☐	

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

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December 17, 2011 – At 7:00am, acquire downhole pressure gauges from all three wells. Tag bottom of fill and come out of hole very slowly, making 7-minute gradient stops while coming out of WDW-3 every 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 ft, 3000 ft, 2000 ft, 1000 ft, surface). Run in hole with a temperature tool and conduct temperature survey from the surface to the top of the fill. Turn the wells back to Navajo personnel.

SRDade 10/11/11
Accepted for record
NMOCD

RECEIVED
OCT 07 2011
NMOCD ARTESIA

Spud Date: Rig Release Date:

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

SIGNATURE Timothy Jones TITLE Project Engineer DATE 10/3/2011

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

For State Use Only

APPROVED BY:_____ TITLE_____ DATE_____

Conditions of Approval (if any):

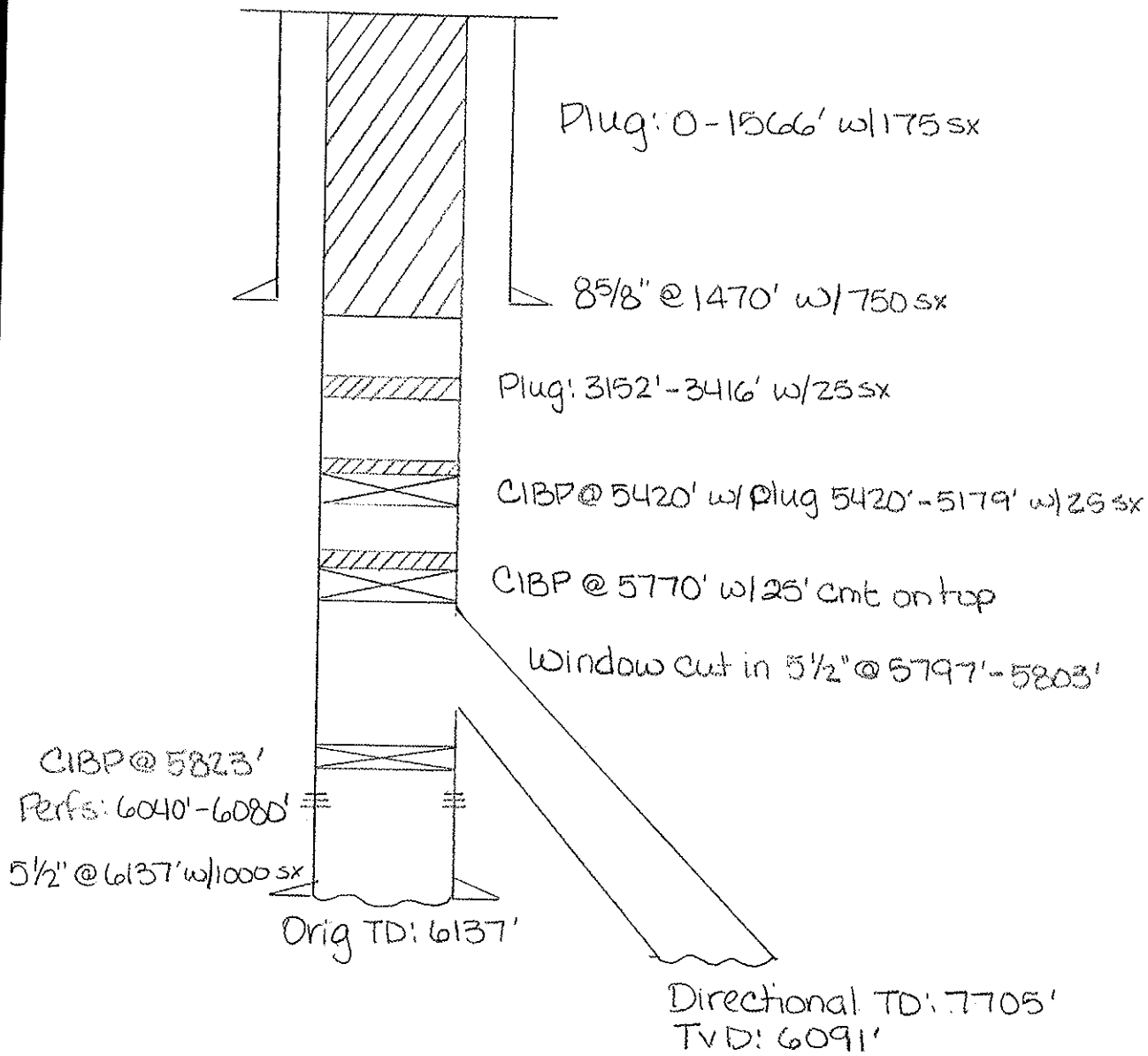
SUBSURFACE

NAVAJO REFINING COMPANY
Map ID No. 90
Artificial Penetration Review

OPERATOR BP America Prod.
LEASE Empire ABO Unit
WELL NUMBER 17A
DRILLED 3-26-59
PLUGGED 12-01-08

STATUS Plugged
LOCATION Sec. 1 -T18S-R27E
MUD FILLED BOREHOLE NA
TOP OF INJECTION ZONE ~7221' Est.
API NO. 30-015- 00703

REMARKS:



Form 9-331a
(Feb. 1951)

COPY TO O. C. C.

APPROVED
FEB 18 1959
ROBERT E. EVANS
ACTING DISTRICT ENGINEER

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Land Office Las Cruces

Lease No. LC 062412

Unit

SUNDRY NOTICES AND REPORTS ON WELLS

1-SF

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

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

Water Basin

USA MALCO REFINERIES "F" February 16, 1959

Well No. 1 is located 1980 ft. from {N/S} line and 660 ft. from {E/W} line of sec. 1

NW/4 SW/4 Section 1 (¼ Sec. and Sec. No.) 18 - S (Twp.) 27 - E (Range) NMPM (Meridian)

Undesignated (Field) Eddy (County or Subdivision) New Mexico (State or Territory)

Empire Area (Est.)

The elevation of the derrick floor above sea level is ..... ft. Furnish later.

DETAILS OF WORK

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

We propose to drill the above well with rotary tools to an approximate depth of 6200' to test the Abo. Casing program will be as follows:

Size of Hole	Size of Casing	Depth	Cement
11	8-5/8	950	Circulate 2% Gel with 100 sacks neat on btm.
7-7/8	5-1/2	6135	150

NOTE: Please insert lease number.

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

Company Pan American Petroleum Corporation

Address Post Office Box 68

Hobbs, New Mexico

By Original Signed

Title Field Superintendent

GPO 918507

FORM C-128
Revised 5-1-57

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

SECTION A

Operator	Lease	Well No.
Pan American Pet. Corp.	U.S.A. Malco Refineries F	1

Unit Letter	Section	Township	Range	County
L	1	18 S	27 E	Eddy

Actual Footage Location of Well: 1980 feet from the South line and 660 feet from the West line

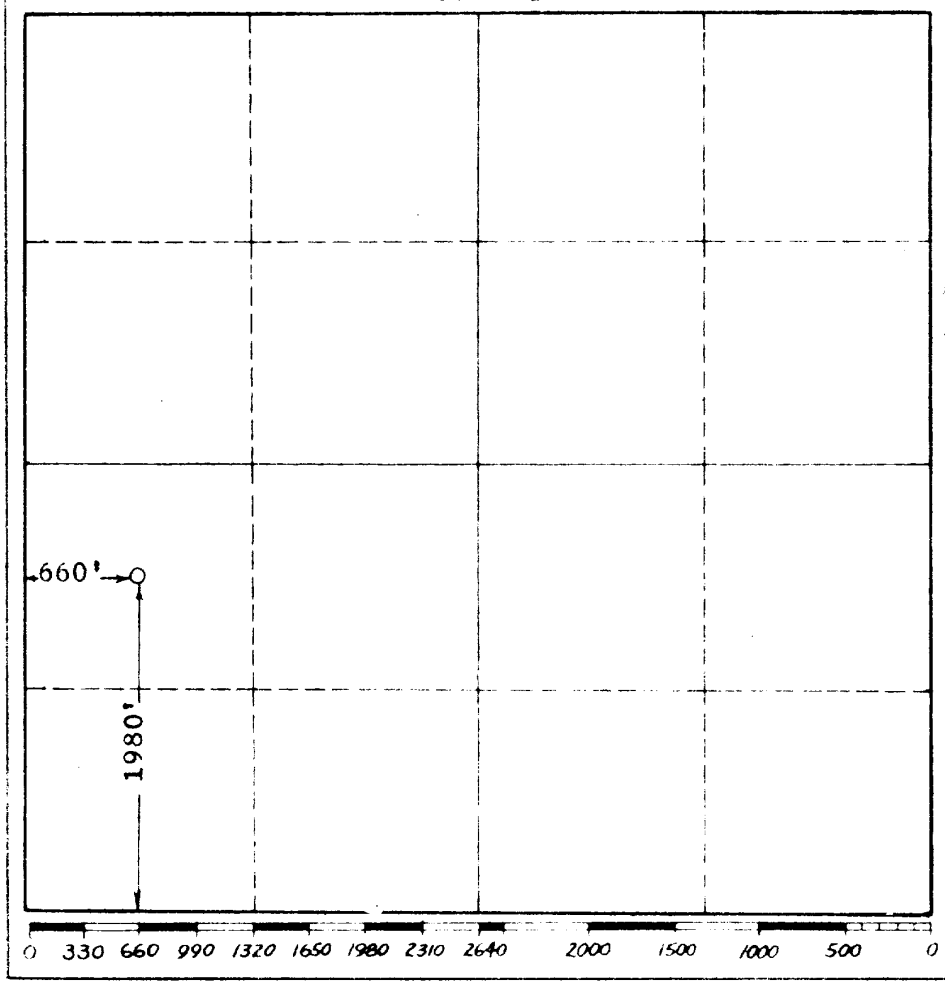
Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
Furnish later	Abo	Empire Abo	40 Acres

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES X NO _____. *("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)*
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization, agreement or otherwise? YES _____ NO _____. If answer is "yes," Type of Consolidation _____
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

RECEIVED
FEB 18 1959
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

SECTION B



CERTIFICATION

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

Name: Original Signed by E. W. BROWN

Position: Field Superintendent

Company: Pan American Petroleum Corp.

Date: February 16, 1959

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

Date Surveyed: 2-10-59

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

John W West

Certificate No. N.M. P.E. & L.S. NO. 676

DIAL 3-3942

DIAL 3-6770

JOHN W. WEST ENGINEERING COMPANY
412 NORTH DAL PASO
HOBBS, NEW MEXICO

February 12, 1959

Pan American Pet. Corp.
Hobbs, New Mexico

Gentlemen:

On February 10, 1959, a survey was made to locate your U.S.A. Malco Refineries "F" No. 1 well at a point 1980 feet from the South line and 660 feet from the West line of Sec. 1, Township 18 South, Range 27 East, N.M.P.M., Eddy County, New Mexico.

A Flag was set at the USGLO Quarter corner marker common to Sections 1 and 2 and the the Transit was set up at the U.S. G.L.O. Section corner marker common to Sections 1, 2, 11 and 12. Thence chaining North from the Transit on the West line of Section 1 a distance of 1980 feet, thence East 660 feet to the location site of the USA Malco Refineries "F" No. 1 well. As a check on our survey we chained West from the location site 660 feet and thence North 609.5 feet to the USGLO Quarter corner marker common to sections 1 and 2, checking in within 0.6 feet of the distance as shown on the USGLO Township Plats.

I hereby certify that the foregoing survey was made in the field by me and that the same is true and correct to the best of my knowledge and belief.

Respectfully submitted,

John W West

John W. West

NE MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

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

REQUEST FOR (OIL) - ~~(GAS)~~ ALLOWABLE

New Well
~~Recompletion~~

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

Hobbs, New Mexico (Place) April 24, 1959 (Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS:

Pan American Petroleum Corp. - Malco Refineries "F" (Company or Operator) (Lease), Well No. 1, in NW ¼ SW ¼,
L (Unit Letter), Sec. 1, T. 18 S, R. 27 E, NMPM., Empire Abo Pool
Eddy County. Date Spudded 3-26-59 Date Drilling Completed 4-20-59

Please indicate location:

D	C	B	A
E	F	G	H
L X	K	J	I
M	N	O	P

Sec. 1, T-18-S, R-27-E
1980 S - 660 W

Elevation 3581 RDB Total Depth 6137 PBTD 6101

Top Oil/~~Gas~~ Pay 5460 Name of Prod. Form. Abo

PRODUCING INTERVAL -

Perforations 6040-6080 with 2 shots per foot

Open Hole - Depth Casing Shoe 6137 Depth Tubing 6077

OIL WELL TEST -

Natural Prod. Test: _____ bbls.oil, _____ bbls water in _____ hrs, _____ min. Choke Size _____

Test After Acid or ~~Fracture~~ Treatment (after recovery of volume of oil equal to volume of load oil used): 82 bbls.oil, no bbls water in 24 hrs, _____ min. Choke Size 10/64"

GAS WELL TEST -

Natural Prod. Test: _____ MCF/Day; Hours flowed _____ Choke Size _____

Method of Testing (pitot, back pressure, etc.): _____

Test After Acid or Fracture Treatment: _____ MCF/Day; Hours flowed _____

Choke Size _____ Method of Testing: _____

Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and sand): Acidized with 500 gallons 15% regular

Casing Press. PKR Tubing Press. 725 Date first new oil run to tanks 4-20-59

Oil Transporter Malco Refineries Inc.

Gas Transporter _____

Tubing, Casing and Cementing Record

Size	Feet	Sax
8-5/8	1468	750
5-1/2	6167	1000
2-3/8	6077	

Remarks: _____

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

Approved _____, 19____

OIL CONSERVATION COMMISSION

By: M. L. Armstrong

Title _____

PAN AMERICAN PETROLEUM CORPORATION
(Company or Operator)

Original Signed by
L. W. BROWN
(Signature)

Title Field Superintendent

Send Communications regarding well to:

Name J. W. Brown

Address Box 68 - Hobbs, New Mexico

NEW M ICO OIL CONSERVATION CO MISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

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

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Pan American Petroleum Corporation Lease Malco Refineries "F"

Well No. 1 Unit Letter L S 1 T 18 S R 27 E Pool Undesignated

County Eddy Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit F S 1 T 18 S R 27 E

Authorized Transporter of Oil or Condensate Malco Refineries Inc.

Address Box 660 - Roswell, New Mexico
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas

Address
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Vented pending market arrangements.

Reasons for Filing: (Please check proper box) New Well (x)

Change in Transporter of (Check One): Oil ( ) Dry Gas ( ) C'head ( ) Condensate ( )

Change in Ownership ( ) Other ( )
(Give explanation below)

Remarks:

Completed as an oil well 4-21-59.

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 24th day of April 19 59

By Original Signed By J. W. BROWN

Approved 19

Title Field Superintendent

OIL CONSERVATION COMMISSION

Company Pan American Petroleum Corporation

By M L Armstrong

Address Box 68

Title

Hobbs, New Mexico

COPY TO O. C. C.

Form 9-330

Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Las Cruces
SERIAL NUMBER LC 062412
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company Pan American Petroleum Corp. Address Box 68 - Hobbs, New Mexico

Lessor or Tract USA Malco Refineries "F" Field Empire Abo State New Mexico

Well No. 1 Sec. 1 T. 18S R. 27E Meridian NMPM County Eddy

Location 1980 ft. [N.] of S Line and 660 ft. [E.] of W Line of Section 1 Elevation 3581 RDB (Derrick floor relative to sea level)

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

Signed Original Signed by L. W. BROWN

Date April 23, 1959 Title Field Superintendent

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

Commenced drilling 3-26-, 19 59 Finished drilling 4-20-, 19 59

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from 6040 to 6080 No. 4, from to

No. 2, from to No. 5, from to

No. 3, from to No. 6, from to

IMPORTANT WATER SANDS

No. 1, from to No. 3, from to

No. 2, from to No. 4, from to

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
8-5/8	24	8	J-55	1468	Float				Surface
5-1/2	14	8	J-55	6367	Float		6040	6080	Oil String
							w/2 shots per foot		

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8	1470	750	HOWCO		
5-1/2	6137	1000	HOWCO		

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth set

Adapters—Material Size

SHOOTING RECORD

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

TOOLS USED

Rotary tools were used from 0 feet to 6137 feet, and from feet to feet

FOLD | MARK

Rotary tools were used from Surface feet to 6137 feet, and from ..... feet to ..... feet

Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet

DATES

Completed April 21 19 59 — Put to producing April 20, 19 59

The production for the first 24 hours was 82 barrels of fluid of which 100 was oil; ..... % emulsion; ..... % water; and ..... % sediment. Gravity, °Bé. 42°

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

Rock pressure, lbs. per sq. in. .....

EMPLOYEES

B. J. Wright, Driller — R. E. Miles, Driller

J. W. Martin, Driller — W. P. Tadlock, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	387	387	Red Bed
387	600	213	Red Bed, Anhy.
600	1025	425	Anhy.
1025	1463	438	Anhy., Gyp
1463	1521	58	Anhy., Lime
1521	4809	3288	Lime
4809	4822	13	Lime and Dolomite
4822	4844	22	Dolomite
4844	4911	67	Lime
4911	5557	646	Dolomite, Lime
5557	6137	580	Lime

TOPS

San Andres	-	1830
Glorieta	-	3220
Abo Reef	-	5460

[OVER]

16—43094-4

16—43094-2 U. S. GOVERNMENT PRINTING OFFICE

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

Well was drilled to a TD of 6137', perforated 6040'-6080' w/2 shots per foot and acidised with 500 gallons 15% regular acid. On test well flowed 82 BO, no water in 24 hrs., (85.3 MCF) gas on 10/64" choke, TPF 72# GOR 1041

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

NEW MEXICO

OIL CONSERVATION COMMISSION

Post Office Box 2045
Hobbs, New Mexico
May 26, 1959

Pan American Petroleum Corporation
P. O. Box 68
Hobbs, New Mexico

Re: Undesignated Well
Placed in Pool

Gentlemen:

In accordance with the provisions of Commission Order R-1397, your Malco Refineries "P" No. 1 oil well in Unit L of Section 1, Township 18 South, Range 27 East, which is currently listed in the "Undesignated Section" of the Proration Schedule, will appear in the Empire-Abo Pool in the _____ Schedule.

Please file Form C-110 showing the change in pool designation of this well with the Artesia office of the Oil Conservation Commission.

Yours very truly,

OIL CONSERVATION COMMISSION

R. F. Montgomery
Proration Manager

RFM:mg

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

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

REC

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

MAY 25 1959

Company or Operator Pan American Petroleum Corporation Lease Malco Refineries "F"

Well No. 1 Unit Letter L S 1 T 18 R 27 Pool Empire Abo

County Eddy Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit F S 1 T 18S R 27E

Authorized Transporter of Oil or Condensate Continental Pipe Line Company

Address Box 367, Artesia, New Mexico
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas _____

Address _____
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Vented pending market arrangements

Reasons for Filing: (Please check proper box) New Well ( )

Change in Transporter of (Check One): Oil ( ) Dry Gas ( ) C'head ( ) Condensate ( )

Change in Ownership ( ) Other ~~Change Transporter~~ (X)
(Give explanation below)

Remarks:

Filed to change transporter from Malco Refineries Inc. to Continental Pipe Line Company effective May 1, 1959.

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 19th day of May 19 59

Original Signed by
L. W. BROWN
By _____

Approved MAY 25 1959 19 ___

Title Area Superintendent

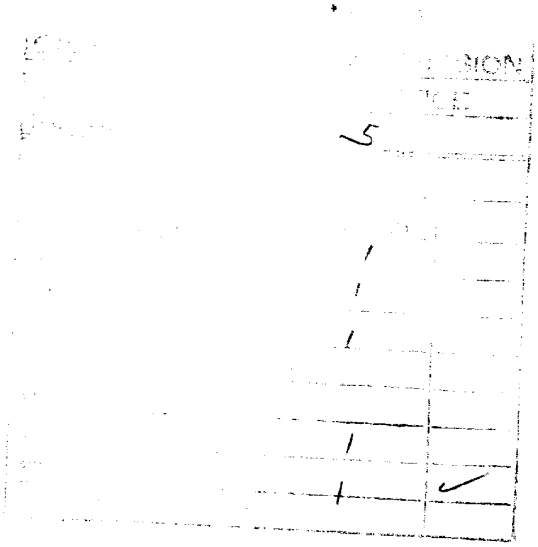
OIL CONSERVATION COMMISSION

Company Pan American Petroleum Corporation

By W. Armstrong

Address Box 68 - Hobbs, New Mexico

Title OIL AND GAS INSPECTOR



NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

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

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Pan American Petroleum Corporation Lease Malco Refineries "F"

Well No. 1 Unit Letter L S 1 T 18 R 27 Pool Empire Abo

County Eddy Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit F S 1 T 18 R 27

Authorized Transporter of Oil or Condensate Continental Pipe Line Company

Address Box 367 Artesia, New Mexico
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas _____

Address _____ Date Connected _____
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Vented pending market arrangements.

Reasons for Filing: (Please check proper box) New Well ( )

Change in Transporter of (Check One): Oil ( ) Dry Gas ( ) C'head ( ) Condensate ( )

Change in Ownership ( ) Other Change Pool Designation (X)
(Give explanation below)

Remarks:

Filed to show pool designation as Empire Abo.

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 29th day of May 19 59

Original Signed by
J. W. BROWN

By _____

Title Area Superintendent

Company Pan American Petroleum Corporation

Address Box 68

Hobbs, New Mexico

Approved JUN 8 1959 19

OIL CONSERVATION COMMISSION

By W. A. Gressett

Title OIL AND GAS INSPECTOR

OIL CONSERVATION COMMISSION		
ARTESIA DISTRICT OFFICE		
No. Copies Received	5	
Operator		
Santa Fe		
Proration Office		
State Land Office		
U. S. G.S.		
Transporter		
File		

FORM 52 2-57

PAN AMERICAN PETROLEUM CORPORATION

Post Office Box 68
Hobbs, New Mexico

April 16, 1959

File: JWM-131-986.510.1

Subject: Request for Exeption to Rule 111 Deviation Tests, USA Malco Refineries "F" No. 1, Empire Abo Field

New Mexico Oil Conservation Commission (2)
P. O. Box 871
Santa Fe, New Mexico

Attention: Mr. D. S. Nutter, Chief Engineer

Gentlemen:

This has reference to your conversation with Mr. N. S. Whitmore of Pan American on April 14, 1959, concerning the deviation test requirements of Rule 111. It is our understanding that the Commission may grant exceptions to the requirement for running a directional survey where computation of the deviation surveys periodically run in conjunction with drilling operations indicates the bottom of hole could not conceivably be off the lease.

Currently, Pan American Petroleum Corporation is drilling their joint interest USA Malco Refineries "F" No. 1 in the Empire Abo Field. This well was staked 1980 feet from the south line and 660 feet from the west line of Section 1, T-18-S, R-27-E, Eddy County, New Mexico. The projected total depth is approximately 6150 feet. At a depth of 4805 feet a deviation test registered 6-1/2° which was the first deviation recorded above 5°. Since that depth the deviation has varied between 6-1/4° and 6-1/2° with the well currently drilling at approximately 5530 feet.

The attached tabulation furnishes the deviation surveys run on the well to date along with a computation of the drift in a continuous direction. The assumption that the drift would remain in a continuous direction was made to analyze the drift under the least desirable condition to determine if the bottom of the hole were possibly approaching a lease line. That drift would be maintained in a continuous straight line is also considered very unlikely to occur under actual drilling conditions.

These data indicate the horizontal drift from the surface to 5500 feet to be approximately 270 feet. Considering the deviation would remain relatively constant for the remaining 650 feet to be drilled, the maximum anticipated horizontal drift would approach 343 feet. Thus it is indicated that deviations to total depth of the magnitude currently encountered would not place the bottom of the well [illegible] line for this 660 foot location.

It is therefore respectfully requested that Pan American Petroleum Corporation be granted an exception to Rule 111 for running a directional survey on their USA Maleo Refineries "F" No. 1. Your early consideration of this request will be sincerely appreciated as it is anticipated that drilling operations will be completed by April 18, 1959.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

J. W. Brown
Field Superintendent

By: J. W. Mack

cc: Mr. M. L. Armstrong
New Mexico Oil Conservation Commission
Artesia, New Mexico

As an director, respectfully requested that the American Petroleum Institute be granted an exemption by July 1st for running a directional survey on their gas [illegible] Nos. 1. Your early consideration of this request will be sincerely appreciated as it is anticipated that drilling operations will be completed by April 15, 1955.

Yours very truly,

[illegible] CONSULTING ENGINEERS CORPORATION

[illegible]
[illegible]

By: [illegible]

cc: Mr. L. M. Alexander
New Mexico Oil Conservation Commission
Artesia, New Mexico

DEVIATION SURVEYS
USA MALCO REFINERIES "F" NO. 1

Depth Totco Ran	Interval Between Totcos	Drift Indicated By Totco	Horizontal Drift Over Interval	Cumulative Horizontal Drift
500'	500'	3/4°	6.55'	6.55'
970'	470'	3/4°	6.15'	12.70'
1350'	380'	3/4°	4.97'	17.67'
1850'	500'	1-3/4°	15.27'	32.94'
2050'	200'	2°	6.98'	39.92'
2380'	330'	1-1/2°	8.64'	48.56'
2970'	590'	1-3/4°	18.02'	66.58'
3410'	440'	2-3/4°	21.11'	87.69'
3745'	335'	3-1/2°	20.45'	108.14'
4050'	305'	3-1/2°	18.62'	126.76'
4350'	300'	4-1/2°	23.45'	150.21'
4555'	205'	4-3/4°	16.98'	167.19'
4650'	95'	4-3/4°	7.87'	175.06'
4805'	155'	6-1/2°	17.55'	192.61'
4990'	185'	6-1/2°	20.94'	213.55'
5115'	125'	6-1/4°	13.61'	227.16'
5245'	130'	6-1/4°	14.15'	241.31'
5380'	135'	6-1/2°	15.28'	256.59'
5500'	120'	6-1/2°	13.58'	270.17'

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

COPY

April 20, 1959

Pan American Petroleum Corporation
P. O. Box 68
Hobbs, New Mexico

Attention: J. W. Brown

Re: Request for Exception to Rule 111 Deviation Tests, USA Malco Refineries "F" No. 1, Empire-Abo Pool.

Gentlemen:

Reference is made to your letter of April 16, 1959, concerning the above-captioned subject.

Inasmuch as the deviation survey which you have run establishes conclusively that the USA Malco Refineries "F" No. 1 Well will be bottomed on the lease where it is located, it is my opinion that the requirements of Rule 111 have been fully complied with.

Accordingly a hearing on this matter is unnecessary.

Very truly yours,

A. L. PORTER, Jr.,
Secretary-Director

ALP/OEP/ir

cc: Mr. M. L. Armstrong
Oil Conservation Commission
Artesia, New Mexico

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

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

MAY 1959

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Pan American Petroleum Corporation Lease Malco Refineries F

Well No. 1 Unit Letter L S 1 T 18 R 27 Pool Empire Abo

County Eddy Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit F S 1 T 18 R 27

Authorized Transporter of Oil or Condensate McWood Corp. (Trucks)

Address 330 Petroleum Building Abilene, Texas
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas

Address
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Vented pending market arrangements

Reasons for Filing: (Please check proper box) New Well ( )

Change in Transporter of (Check One): Oil ( ) Dry Gas ( ) C'head ( ) Condensate ( )

Change in Ownership ( ) Other Change Transporter (X)
(Give explanation below)

Remarks:

Filed to change Transporter from Continental Pipe Line Co. to McWood Corp. (Trucks)

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 29 day of May 19 59

Original Signed by
J. W. BROWN

By

Title Area Superintendent

Company PAPC

Address Box 68
Hobbs, New Mexico

Approved 19

OIL CONSERVATION COMMISSION

By M. L. Armstrong

Title

OIL CONSERVATION COMMISSION		
ARTESIA DISTRICT OFFICE		
No. Copies Received		
DISTRIBUTION		
	NO. FURNISHED	
Operator		
State Land Office		
U. S. G. S.		
Transporter		
File		

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

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

RECEIVED
SEP 9 1959

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Pan American Petroleum Corporation Lease USA Malco Refineries F

Well No. 1 Unit Letter L S 1 T 18S R 27E Pool Empire Abo

County Eddy Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit F S 1 T 18S R 27E

Authorized Transporter of Oil or Condensate Service Pipe Line Co., Box 337, Midland, Texas

Address _____
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas Gas Vented

Address _____ Date Connected _____
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:

Gas Flared

Reasons for Filing: (Please check proper box) New Well ( )

Change in Transporter of (Check One): Oil (x) Dry Gas ( ) C'head ( ) Condensate ( )

Change in Ownership ( ) Other ( )
(Give explanation below)

Remarks:

Change in transporter from McWood Corporation (Trucks) to Service Pipe Line Co., effective 9-10-59

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 8 day of September 19 59

By Original Signed by J. W. BROWN

Approved SEP 10 1959 19

Title Area Superintendent

OIL CONSERVATION COMMISSION

Company Pan American Petroleum Corporation

By M. Armstrong

Address Box 68 - Hobbs, NM

Title

OIL CONSERVATION COMMISSION
ARTESIA DISTRICT OFFICE
No. Copies Received 3
D.
OR
PROD
STA
U. S. G.
ER
BUREAU OF MINES

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Form C-110
Revised 7/1/55

RECEIVED
SEP 19 1960
O. C. C.
ARTESIA, OFFICE

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

NAME CHANGED:
FROM: PAN AMERICAN PETR. CORP.
TO: AMOCO PRODUCTION CO.
EFFECTIVE: 2-1-71

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Company or Operator ~~Pan American Petroleum Corporation~~ Lease ~~Maico~~ "F" Federal

Well No. 1 Unit Letter L S 1 T 18S R 27E Pool Empire Abo

County Eddy Kind of Lease (State, Fed. or Patented) Federal

If well produces oil or condensate, give location of tanks: Unit F S 1 T 18S R 27E

Authorized Transporter of Oil or Condensate ~~Service Pipe Line Co.~~
Address 3411 Knoxville Avenue
Lubbock, Texas 79413
Eff. 4/1/70 name change from Service to Amoco Pipeline Co.
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas ~~Empire Abo Gasoline Plant~~
Address ~~Pan American Petr. Corp.~~, Box 68, Hobbs, N.M. Date Connected 9-3-60
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:
Effective 2-1-71
~~Gas Transporter Name Changed:~~
From: Pan American Petroleum Corp.
~~To: Amoco Production Co.~~

Reasons for Filing: (Please check proper box) New Well ( )
Change in Transporter of (Check One): Oil ( ) Dry Gas ( ) C'head (x) Condensate ( )

Change in Ownership ( ) Other ( )
Remarks: (Give explanation below)

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 14th day of September 19 60

By Original Signed by J. W. BROWN

Approved SEP 15 1960 19

Title Area Superintendent

OIL CONSERVATION COMMISSION

Company Pan American Petroleum Corporation

By M. Armstrong

Address Box 68

Title

Hobbs, New Mexico

OIL CONSERVATION COMMISSION
ARTESIA DISTRICT OFFICE
No. Copies Received 5

D

SANTA FE
MAIL OFFICE
FLORATION
STATE LAND OFFICE
U.S.G.S.
TRANSPORTER
FILE
BUREAU OF MINES

NEW MEXICO
OIL CONSERVATION COMMISSION
P. O. DRAWER DD
ARTESIA, NEW MEXICO

March, 1968

No. A 1

SUPPLEMENT TO THE OIL PRORATION SCHEDULE

DATE 3/1/68

PURPOSE: ALLOWABLE ASSIGNMENT (BACK ALLOWABLE)

Effective 3/1/68, back allowable is hereby assigned to the following Pan American Pet. Corp. wells in the Empire Abo Pool in accordance with Commission Order No. A-220.

Malco F Lease

#1-L, 1-18-27, 18 bbls total
#2-E, " , 18 bbls total
#3-M, " , 18 bbls total
#4-F, " , 15 bbls total
#5-K, " , 16 bbls total
#6-B, " , 18 bbls total
#7-G, " , 18 bbls total
#8-C, " , 18 bbls total
#9-H, " , 16 bbls total
#11-A, " , 18 bbls total
#12-M, " , 18 bbls total

Malco R Lease

#10-D, 1-18-27, 18 bbls total

NAME CHANGED:
FROM: PAN AMERICAN PETR. CORP.
TO: AMOCO PRODUCTION CO.
EFFECTIVE: 2-1-71

WAG/jw

Pan Am. Petr. Corp.

Service
Amoco 4-1-70

OIL CONSERVATION COMMISSION

SUPERVISOR, DISTRICT NO. 2

EXTRA COPY

Copy to D.O. NM055 7371

Form 9-331
(May 1963)

RECEIVED
MAY 15 1972
ARTESIA, OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. LEASE DESIGNATION AND SERIAL NO.
~~LC 062412~~

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

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

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
Amoco Production Company

8. FARM OR LEASE NAME
MALCO "F" Federal

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

9. WELL NO.
1

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

10. FIELD AND POOL, OR WILDCAT
EMPIRE ABO

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
1-18-27 NMPM

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3581' R.D.B.

12. COUNTY OR PARISH
EDDY

13. STATE
NM

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

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

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

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

In an effort to increase productivity propose to acidize perforations 6040'-6080' w/ 2500 gal 15% NE. Evaluate and restore to production.

Latest flow test 4-20-72, 102 BO + 0 BW 24 hrs. GOR 961.

TD 6137'
PBD 6101'
5½" CSA 6137' - Cmt Circ.
PERFS: 6040'-80' w/2 JSPF.

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

SIGNED _____ TITLE AREA SUPERINTENDENT DATE MAY 8 1972

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
MAY 12 1972
R. L. BEEKMAN
ACTING DISTRICT ENGINEER

*See Instructions on Reverse Side

OL 4- USGS-Art
1- Div
1- SUSP
1- RRY
1- HONDO

N. M. O. C. C. COPY

copy to D.J.

Form 9-331
(May 1963)

RECEIVED
MAY 24 1972
O. C. C.
ARTESIA, OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
NM-0557371

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

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

7. UNIT AGREEMENT NAME

1. OIL WELL ☒ GAS WELL ☐ OTHER

2. NAME OF OPERATOR
Amoco Production Company

8. FARM OR LEASE NAME
MALCO "F" Federal

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

9. WELL NO.
1

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

10. FIELD AND POOL, OR WILDCAT
Empire Abo

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
1-18-27 NMPM

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
3581' R.D.B.

12. COUNTY OR PARISH
EDDY

13. STATE
NM

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

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

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

Perforations 6040-80' were acidized w/ 2500 gal 15% NE acid. Evaluated & restored to prod.

Prior - Flw 102 BO + 0 BW 24 hrs. GOR 961
after - Flw 152 BO + 0 " " " GOR 691

RECEIVED
MAY 19 1972
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

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

SIGNED _____ TITLE AREA SUPERINTENDENT DATE MAY 17 1972

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
MAY 25 1972
R. L. BEEKMAN
ACTING DISTRICT ENGINEER

0+4-USGS-Art
1-Div
1-Susp
1-Hondu

*See Instructions on Reverse Side

5

SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
OPERATOR		
PRORATION OFFICE		

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

RECEIVED
SEP 26 1973
O. C. C.
ARTESIA, OFFICE

I. Operator: Atlantic Richfield Company

Address: P. O. Box 1710, Hobbs, New Mexico 88240

Reason(s) for filing (Check proper box)
- New Well [ ]
- Recompletion [ ]
- Change in Ownership [X]

Change in Transporter of:
- Oil [ ]
- Dry Gas [ ]
- Casinghead Gas [ ]
- Condensate [ ]

Other (Please explain): Included in Empire Abo Unit eff: 10-1-73. Change in lease name from MALCO F Federal #1.

If change of ownership give name and address of previous owner: AMOCO Production Company P. O. Box 68, Hobbs, New Mexico

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease (State, Federal or Fee)	Lease No.
Empire Abo Unit K	17	Empire Abo	Federal	

Location: Unit Letter L; 1980 Feet From The South Line and 660 Feet From The West

Line of Section 1, Township 18S, Range 27E, NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [X] or Condensate [ ]: AMOCO Pipe Line Company
Address (Give address to which approved copy of this form is to be sent): 2300 Continental Bk.Bldg.,Ft. Worth,Tex. 76102

Name of Authorized Transporter of Casinghead Gas [X] or Dry Gas [ ]: AMOCO Production Company
Address (Give address to which approved copy of this form is to be sent): P. O. Box 68, Hobbs, New Mexico 88240

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	F	1	18S	27E	yes	9-3-60

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Resv.	Diff. Resv.

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth
Perforations			Depth Casing Shoe

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pitot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION COMMISSION

APPROVED SEP 28 1973, 19____

BY W. A. Gressett

TITLE OIL AND GAS INSPECTOR

R. L. Stockelfleth
(Signature)

Sr. Acctg. Clerk
(Title)

9-26-73
(Date)

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepene well, this form must be accompanied by a tabulation of the deviati tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allo able on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owne well name or number, or transporter, or other such change of conditi

Separate Forms C-104 must be filed for each pool in multip completed wells.

DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

RECEIVED

NOV - 6 1978

O. C. C.
ARTESIA, OFFICE

Supersedes Old C-102 and C-103 Effective 1-1-65

5a. Indicate Type of Lease: State [ ] Fed [X]

5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Unit Agreement Name: Empire Abo Unit

1. OIL WELL [X] GAS WELL [ ] OTHER-

8. Farm or Lease Name: EAU "K"

2. Name of Operator: Atlantic Richfield Company

9. Well No.: 17

3. Address of Operator: P. O. Box 129 Artesia, New Mexico 88210

10. Field and Pool, or Wildcat: Empire Abo

4. Location of Well: UNIT LETTER L, 1980 FEET FROM THE South LINE AND 660 FEET FROM THE West LINE, SECTION 1 TOWNSHIP 18S RANGE 27E NMPM.

15. Elevation (Show whether DF, RT, GR, etc.): KB 3581'

12. County: Eddy

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]	CHANGE PLANS	[ ]	COMMENCE DRILLING OPNS.	[ ]	PLUG AND ABANDONMENT	[ ]
PULL OR ALTER CASING	[ ]			CASING TEST AND CEMENT JOB	[ ]		
OTHER	[ ]			OTHER Piping braden head to surface.			[ ]

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Piping braden head to surface.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED N. H. Truitt TITLE Dist. Prod. Supervisor DATE 10-31-78

APPROVED BY B W Weaver TITLE Field Rep DATE 11-8-78

CONDITIONS OF APPROVAL, IF ANY:

DISTRIBUTION		6
SANTA FE		1
FILE		1 ✓
U.S.G.S.		
LAND OFFICE		
TRANSPORTER	OIL	1
	GAS	2
OPERATOR		1
PRORATION OFFICE		

NEW MEXICO OIL CONSERVATION COMMISSION

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

RECEIVED
MAR 14 1979
O. C. C.
ARTESIA, OFFICE

I.

Operator: ARCO Oil and Gas Company - Division of Atlantic Richfield Company

Address: P. O. Box 1710, Hobbs, New Mexico 88240

Reason(s) for filing *(Check proper box)*: New Well ☐ Recompletion ☐ Change in Ownership ☐ Change in Transporter of: Oil ☐ Dry Gas ☐ Casinghead Gas ☐ Condensate ☐

Other *(Please explain)*: Change in Operator Name effective: 4-1-79

If change of ownership give name and address of previous owner _____

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease: State, Federal or Fee
Empire Abo Unit "K"	17	Empire Abo	Federal

Location: Unit Letter L ; 1980 Feet From The South Line and 660 Feet From The West

Line of Section 1, Township 18S Range 27E, NMPM, Eddy County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [X] or Condensate [ ]: Amoco Pipeline Company
Address *(Give address to which approved copy of this form is to be sent)*: 2300 Continental National Bank Bldg. Ft. Worth, Texas 76102

Name of Authorized Transporter of Casinghead Gas [X] or Dry Gas [ ]: Amoco Production Company, Phillips Petroleum Company
Address *(Give address to which approved copy of this form is to be sent)*: P.O. Drawer A, Levelland, Texas 79336; 4001 Penbrook, Odessa, Texas 79760

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	F	1	18	27	yes	AMO & PP 9-3-60

If this production is commingled with that from any other lease or pool, give commingling order number: _____

IV. COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v.

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
No Change			
Pool	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
Perforations			**Depth Casing Shoe**

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT

V. TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method *(Flow, pump, gas lift, etc.)*	
No Change			
Length of Test	**Tubing Pressure**	**Casing Pressure**	**Choke Size**
Actual Prod. During Test	**Oil-Bbls.**	**Water-Bbls.**	**Gas-MCF**

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method *(pitot, back pr.)*	**Tubing Pressure**	**Casing Pressure**	**Choke Size**

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION COMMISSION

APPROVED APR 09 1979, 19 _____

BY W. A. Gressett

George H. Rooks
(Signature)

District Prod & Drlg Supt.
(Title)

3-7-79
(Date)

TITLE SUPERVISOR, DISTRICT II

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out Sections I, II, III, and VI only for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply

C/St
LT
SI CP

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-104
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

Operator name and Address	OGRID Number
ARCO Permian A Unit of Atlantic Richfield Co. P.O. Box 1710 Hobbs, NM 88240	000990
	Reason for Filing Code: JUN 1 1994 CH

API Number	Pool Name	Pool Code
30 - 0 15-00703	Empire ABO	22040
Property Code	**Property Name**	**Well Number**
001474	Empire ABO Unit "K"	17

II. Surface Location

Ul or lot no.	Section	Township	Range	Lot.Idn	Feet from the	North/South Line	Feet from the	East/West line	County
L	1	18S	27E		1980	S	660	W	Eddy

Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County

Lse Code	Producing Method Code	Gas Connection Date	C-129 Permit Number	C-129 Effective Date	C-129 Expiration Date
F	F				

III. Oil and Gas Transporters

Transporter OGRID	Transporter Name and Address	POD	O/G	POD ULSTR Location and Description
000734	AMOCO Pipeline 502 NW Avenue Levelland, TX 79336	2811057	O	D-10 F-18S-27E
000756	AMOCO Production Co. P.O. Box 68 Hobbs, NM 88240	2811047	G	F-1-18S-27E
009171	GPM Gas Corp. 4001 Penbrook Odessa, TX 79760	2811047	G	"

IV. Produced Water

POD	POD ULSTR Location and Description

V. Well Completion Data

Spud Date	Ready Date	TD	PBTD	Perforations

Hole Size	Casing & Tubing Size	Depth Set	Sacks Cement

VI. Well Test Data

Date New Oil	Gas Delivery Date	Test Date	Test Length	Tbg. Pressure	Csg. Pressure

Choke Size	Oil	Water	Gas	AOF	Test Method

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION DIVISION

Signature: Kellie D. Murrish	Approved by: SUPERVISOR, DISTRICT II
Printed name: Kellie D. Murrish	Title:
Title: Records CLerk II	Approval Date: JUN 6 1994
Date: 6-1-94 Phone: 505-391-1649	

* If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature	Printed Name	Title	Date

NM OIL CONS COMMISSION
Drawer DD
Artesia, NM 88210

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
LC-062412 NM 055937

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
EMPIRE ABO UNIT"K" # 17

2. Name of Operator
ARCO Permian

9. API Well No.
30-015-00703

3. Address and Telephone No.
P.O.BOX 1610,MIDLAND, TX 79702 915 688-5672

10. Field and Pool, or exploratory Area
EMPIRE ABO

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980 FSL & 660 FWL(UNIT LETTER L)
1-18S-27E

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
	[ ] Recompletion	[ ] New Construction
[ ] Subsequent Report	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
[ ] Final Abandonment Notice	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other ADD HORIZONTAL EXT	[ ] Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

PROPOSE TO ADD HORIZONTAL DRAINHOLE AS FOLLOWS:
1. POH W/PROD CA.
2. SET RETRIEVABLE WHIPSTOCK.
3. SIDETRACK & DRILL 250' RADIUS CURVE.
4. DRILL 1000' HORIZONTAL LATERAL.
5. RETRIEVE WHIPSTOCK.
6. RIH W/PROD CA.

RECEIVED
MAY - 9 1995
OIL CON. DIV.
DIST. 2

MAY 01 1995
Roswell, New Mexico

Subject to
Like Approval
by State OCD

14. I hereby certify that the foregoing is true and correct
Signed Ken W Gosnell Title AGENT Date 05-03-95

(This space for Federal or State office use)
Approved by (ORIG. SGD.) JOE G. LARA Title PETROLEUM ENGINEER Date 5/5/95
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

HORIZONTAL SIDETRACK PROCEDURE

DATE: May 1, 1995

WELL: **Empire Abo #K-17** **DRILLED:** 1959 **FIELD:** Empire Abo **COUNTY:** Eddy, NM

BY: P.N. Drennon **TD:** 6,137' **PBD:** 6,101' **DATUM:** 12' KB

CASING:	SIZE	WEIGHT	GRADE	SET @	SX CMT	TOC
SURFACE:	8 5/8"	24#	J-55	1,470'	750	surf-circ
PROD:	5 1/2"	14#	J-55	6,137'	1,000	surf-circ

PERFORATIONS: Open perfs: Abo 6,040'-6,080'

HISTORY AND BACKGROUND: Drilled in 1959, completed as a flowing oil well from the Abo.

SCOPE OF WORK: Set retrievable whipstock, sidetrack and drill 250' radius build curve, 1,000' horizontal lateral, retrieve whipstock, complete as flowing/pumping well from existing Abo perfs and new horizontal lateral.

TARGET INFORMATION:		
	Whipstock Depth:	5,810'
	Kickoff Point:	Same as above
	Azimuth:	E (90º)
	Target Depth:	6,060'
	Planned Displacement:	Total 1,250'
	Surface Lacation:	1,980' FSL, 660' FWL, Sec. 1, T-18-S, R-27-E, Eddy Co., N.M.

PROCEDURE

1. MIRU PU, pump, swivel, pits. Install H_2S safety equipment. Pull rods and pump, warehouse same. ND tree, NU BOPE. Pull tubing, LD and warehouse.

2. PU 4 3/4" bit and scraper, 10 3-½" DC, 2 7/8" AOH DP, TIH to PBTD 6,101, circulate @ TD if necessary. RU & run gyro multi-shot survey via DP. RD survey equipment, TOOH, LD bit and scraper.

3. GIH w/ packer and set in vicinity of 5,800'.

4. Test casing and stack to 750 psig.

5. PU anchor, whipstock assembly w/ starter mill, BHA, TIH, hydraulically set anchor @ 5,810'.

Note: Oriented assembly, azimuth E (compass 90º) per O/A Engineer (Gary Smallwood).

6. Shear off whipstock assembly w/ starter mill. Mill out casing and shear bolt assembly to start window, use Abo produced water for circulation. Use polymer additions for additional lift if necessary.

7. TOOH, LD starter mill, PU window mill, 1 jt S-135 AOH DP, BHA, TIH.

8. Finish cutting window, drill out into open hole, circulate clean.

9. TOOH, LD window mill and inspect for proper wear. PU window mill, watermelon mill, BHA.

Note: Air/foam package to be on location at this point.

10. TIH, clean and dress window, drill 8-10' formation, circulate clean.

11. TOOH, LD window and watermelon mills, check for proper wear. PU 4 ¾" drag bit, bent housing motor, bent sub, non-mag DC, 2 7/8" 8.7# PH-6 tbg DC's (minimum 2 DC's in casing @ TD of build curve), TIH.

12. Displace hole w/ stiff foam (expect 700-800 SCF/min w/ 1.75 BPM water w/ 8-10 gal/1000 foamer).

13. RU wet connect, steering tool, land same, drill build curve, plan to drill 23º/100' build rate (radius 250') to max angle of 87º- 90º- from vertical.

14. RD steering tool/wet connect, TOOH, LD build motor, PU packer on DP, TIH, set packer @ ±5,700'.

15. Open by-pass, jet via DP to kick-off and test production from build curve. If necessary, polymer squeeze build curve to shut off excess gas production.

16. TOOH, LD packer, PU 4 ¾" bit, hold motor, Monel DC, 2 7/8" tbg. DC's (minimum 9 DC's in casing @ TD), DP, TIH, RU wet connect, steering tool, land same drill lateral ±1,000' due East. All drilling done w/ stiff foam.

17. TOOH, LD BHA, PU tbg to go to end of lateral, DP, TIH.

18, Stage in and blow hole w/ air to unload foam, @ EOC blow hole dry, load to kill w/ produced water, TOOH.

19. PU CA and production tubing, TIH.

20. Swab to KO well, test.

21. Kill well w/ produced water, TOOH w/ CA.

22. PU die collar, 4 3 1/2" DC, tubing, TIH, latch and release packer stock, TOOH, LD packer stock, die collar, DC's.

23. TIH w/ CA and production tubing.

24. Swab to KO well, test.

25. If recommended, TIH to EOL w/ 1 1/4" coil tubing, spot 15% HCl w/ adds throughout lateral, POOH w/ coil tubing.

26. Swab to KO well, test.

27. TOPS

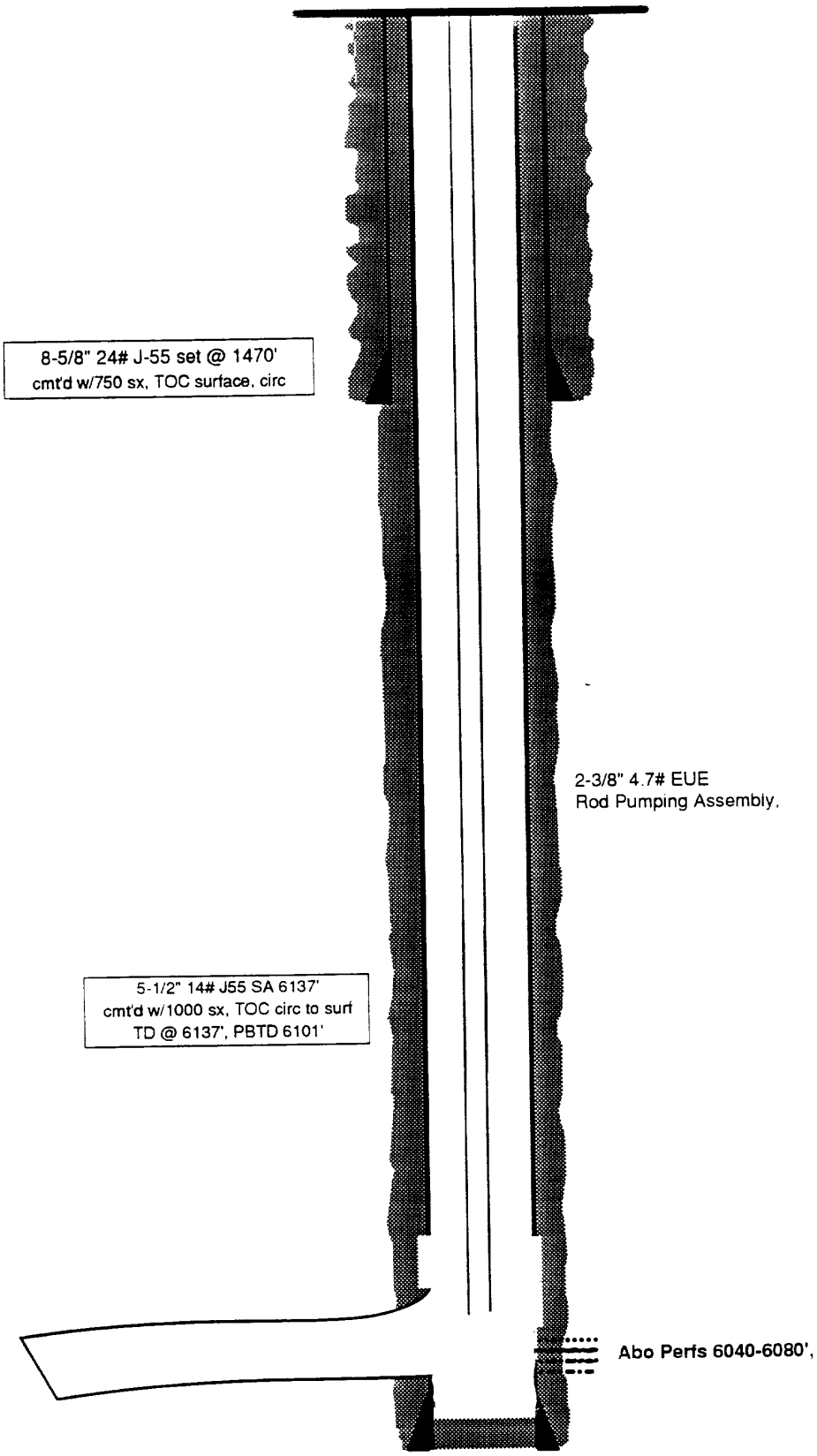
P. N. Drennon

J. E. Shields

EMPIRE ABO K-17

Proposed Status

Drilled 1959



OIL CONS COMMISSION

Drawer DD
Artesia, NM 88210

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
LC-062412

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
8910138010

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
EMPIRE ABO UNIT K-17

2. Name of Operator
ARCO Permian

9. API Well No
30-015-00703

3. Address and Telephone No.
P.O. Box 1710 Hobbs, N.M. 88240 505-391-1649

10. Field and Pool, or exploratory Area
EMPIRE ABO

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980' FSL & 660' FWL, Unit Letter L
Sec. 1, T18S, R27E

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
	[ ] Recompletion	[ ] New Construction
[X] Subsequent Report	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
[ ] Final Abandonment Notice	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other ACIDIZE HORIZONTAL	[ ] Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

TD: 6137' PBD: 6101' PERFS: 6040-6080' CIBP ABOVE PERFS @ 5823'. WHIPSTOCK @ 5782'.
TOP OF WINDOWS @ 5797', BOTTOM OF WINDOW @ 5803'. hORIZONTAL 5800-7705'

06/21/95: ACIDIZE HORIZONTAL EXTENTION 5800-7705 W/2500 GALS 15% NEFE ACID AND 2500 GALS CONDENSATE. DISPLACED ACID/CONDENSATE WHILE MOVING C.T. ALONG HORIZONTAL. FLUSH W/20 BPW.

RECEIVED
SEP 12 1995
OIL CON. DIV.
DIST. 2

ACCEPTED FOR RECORD
J Lara
8 1995
CARLSBAD, NEW MEXICO

AUG 18 10 58 AM '95
RECEIVED

14. I hereby certify that the foregoing is true and correct
Signed Renee D. Murrish Title Administrative Assistant Date 08/15/95

(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

SPECIFIC INSTRUCTIONS

Item 4 - If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE - The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operation, on a Federal or Indian lease.

ROUTINE USES:

(1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.

(2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).

(3) Analyze future applications to drill or modify operations in light of data obtained and methods used.

(4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION - Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that:

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory only for the specific types of activities specified in 43 CFR Part 3160.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

C195

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
~~LC-062412~~ NM-0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
EMPIRE ABO UNIT"K" 17

2. Name of Operator
ARCO Permian

9. API Well No.
30-015-00703

3. Address and Telephone No.
P.O.BOX 1610,MIDLAND, TX 79702 915 688-5672

10. Field and Pool, or exploratory Area
EMPIRE ABO

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980 FSL & 660 FWL(UNIT LETTER L)
1-18S-27E

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other ADD HORIZONTAL EXT	[ ] Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

05-22-95. RUPU. POH W/PROD CA. RIH W/4 3/4 BIT TO 6099 PBD. SET CIBP AT 5830. RIH W/WHIPSTOCK. RAN GYRO SURVEY F/SURF-5798. SET WHIPSTOCK PKR ASSEMBLY AT 5812. CUT 6' WINDOW IN 5 1/2 CSG(5797-5803). DIRECTIONAL DRILLED TO 7705 MD. ACIDIZED W/1700 GALS. RIH W/PROD CA:2 3/8 TBG & PKR TO 5906. PKR SET AT 5772. RDPU 06-13-95.

RECEIVED
DEC 18 1995
OIL CON. DIV.
DIST. 2

ACCEPTED FOR RECORD
DEC 4

14. I hereby certify that the foregoing is true and correct
Signed Ken W Gosnell Title AGENT Date 11-16-95

(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

========= EAGLE DIRECTIONAL SERVICES, INC =========

Date: 6/8/1995 Time: 7:28: 6 PAGE: 1

Filename: "ARCO.SRV" Description: "ARCO PERMIAN EMPIRE ABO UNIT K17 RE-ENTRY HORIZONTAL WELL NW/4 SW/4 SEC 1 T18S R27E EDDY COUNTY, NEW MEXICO"

Target Coordinates: 23.6 N 1064.3 E Target TVD: 6048.600

Using Minimum Curvature Method.

S #	MEASURED DEPTH (feet)	DRIFT ANGLE (deg)	DRIFT DIRECTION (deg)	COURSE LENGTH (feet)	TRUE VERTCAL DEPTH (feet)	VERTCAL SECTION (feet)	RECTANGULAR COORDINATES (feet)		DOGLEG SEVERITY DG/100FT
0	5700.0	5.15	346.670	0.0	5689.8	0.0	210.9 N	168.9 W	0.00
1	5798.0	4.73	350.130	98.0	5787.5	-165.7	219.2 N	170.6 W	0.53
2	5828.0	8.60	48.200	30.0	5817.3	-164.2	221.9 N	169.1 W	24.31
3	5857.0	17.10	64.500	29.0	5845.6	-158.6	225.2 N	163.7 W	31.59
4	5887.0	23.60	76.700	30.0	5873.7	-148.7	228.5 N	153.8 W	25.77
5	5918.0	27.90	93.300	31.0	5901.6	-135.4	229.5 N	140.5 W	26.96
6	5948.0	33.70	97.900	30.0	5927.4	-120.2	228.0 N	125.3 W	20.85
7	5979.0	42.70	97.000	31.0	5951.7	-101.2	225.5 N	106.3 W	29.09
8	6011.0	51.40	95.200	32.0	5973.5	-78.0	223.0 N	83.0 W	27.50
9	6043.0	59.60	96.100	32.0	5991.6	-51.9	220.4 N	56.8 W	25.73
10	6074.0	58.70	97.300	31.0	6007.5	-25.5	217.3 N	30.3 W	4.41
11	6106.0	64.20	100.300	32.0	6022.8	2.1	213.0 N	2.6 W	19.06
12	6136.0	69.40	105.500	30.0	6034.6	28.8	206.8 N	24.3 E	23.54
13	6167.0	76.70	106.200	31.0	6043.7	57.2	198.7 N	52.8 E	23.65
14	6198.0	84.00	104.500	31.0	6048.9	86.4	190.7 N	82.2 E	24.16
15	6230.0	87.00	103.700	32.0	6051.4	117.2	182.9 N	113.2 E	9.70
16	6262.0	87.70	103.200	32.0	6052.8	148.1	175.5 N	144.2 E	2.69
17	6293.0	87.80	103.700	31.0	6054.1	178.1	168.2 N	174.4 E	1.64
18	6323.0	88.10	104.700	30.0	6055.1	207.0	160.9 N	203.4 E	3.48
19	6355.0	87.80	105.200	32.0	6056.3	237.7	152.6 N	234.3 E	1.82
20	6387.0	86.10	103.100	32.0	6058.0	268.5	144.8 N	265.3 E	8.44
21	6418.0	86.00	103.200	31.0	6060.1	298.4	137.8 N	295.4 E	0.46
22	6450.0	85.70	103.200	32.0	6062.4	329.3	130.5 N	326.5 E	0.94
23	6481.0	85.70	103.300	31.0	6064.8	359.2	123.4 N	356.6 E	0.32
24	6512.0	87.20	101.700	31.0	6066.7	389.3	116.7 N	386.8 E	7.07
25	6544.0	87.00	101.000	32.0	6068.3	420.5	110.4 N	418.1 E	2.27
26	6574.0	86.50	100.800	30.0	6070.0	449.8	104.8 N	447.5 E	1.79
27	6604.0	86.50	100.900	30.0	6071.8	479.0	99.1 N	477.0 E	0.33
28	6636.0	88.00	99.300	32.0	6073.4	510.4	93.5 N	508.4 E	6.85
29	6666.0	87.70	99.000	30.0	6074.5	539.9	88.8 N	538.0 E	1.41
30	6697.0	87.40	99.200	31.0	6075.8	570.3	83.9 N	568.6 E	1.16
31	6758.0	88.10	99.400	61.0	6078.2	630.2	74.0 N	628.7 E	1.19
32	6819.0	88.10	100.200	61.0	6080.2	690.1	63.6 N	688.8 E	1.31
33	6848.0	87.90	100.300	29.0	6081.2	718.5	58.5 N	717.3 E	0.77
34	6909.0	88.80	98.400	61.0	6083.0	778.4	48.6 N	777.5 E	3.45
35	6939.0	88.50	98.500	30.0	6083.7	808.0	44.2 N	807.2 E	1.05

S #	MEASURED DEPTH (feet)	DRIFT ANGLE (deg)	DRIFT DIRECTION (deg)	COURSE LENGTH (feet)	TRUE VERTCAL DEPTH (feet)	VERTCAL SECTION (feet)	--- RECTANGULAR COORDINATES (feet)		DOGLEG -SEVERITY DG/100FT
36	7001.0	89.60	98.300	62.0	6084.7	869.1	35.1 N	868.5 E	1.80
37	7062.0	86.60	95.700	61.0	6086.8	929.4	27.7 N	929.0 E	6.51
38	7152.0	89.80	96.500	90.0	6089.6	1018.6	18.1 N	1018.4 E	3.66
39	7214.0	91.30	96.300	62.0	6089.0	1080.0	11.2 N	1080.0 E	2.44
40	7276.0	92.40	96.100	62.0	6087.0	1141.5	4.5 N	1141.6 E	1.80
41	7336.0	92.60	96.500	60.0	6084.4	1200.9	2.1 S	1201.2 E	0.74
42	7362.0	92.90	96.400	26.0	6083.1	1226.6	5.0 S	1227.0 E	1.22
43	7427.0	92.20	97.100	65.0	6080.2	1290.9	12.6 S	1291.5 E	1.52
44	7458.0	90.00	97.600	31.0	6079.6	1321.6	16.6 S	1322.3 E	7.28
45	7520.0	88.30	97.700	62.0	6080.6	1382.8	24.8 S	1383.7 E	2.75
46	7583.0	87.10	98.100	63.0	6083.1	1444.9	33.5 S	1446.0 E	2.01
47	7641.0	86.40	98.500	58.0	6086.4	1502.0	41.8 S	1503.3 E	1.39
48	7672.0	85.80	98.900	31.0	6088.5	1532.5	46.5 S	1533.9 E	2.32
--- Survey #49 is Projected to TD!									
49	7705.0	85.20	98.900	33.0	6091.1	1564.9	51.6 S	1566.4 E	1.82

--- Final Closure Direction: 91.887
--- Final Closure Distance: 1567.266 feet

SCIENTIFIC DRILLING INTERNATIONAL
MIDLAND, TEXAS

Finder Survey
for

ARCO OIL & GAS COMPANY
MIDLAND, TEXAS

Job Number	: 32F0595215
Well Number	: EMPIRE ABO "K" NO. 17
Site Location	: EDDY COUNTY, NEW MEXICO
Latitude	: 32.750
Survey Date(s)	: 24-MAY-95
S.D.C. personnel	: GARY DESPAIN
Calculation Method	: Minimum Curvature
Survey Depth Zero	: RKB
Proposal Direction	: 99.000
Depth Unit	: Feet

Comments :

Inrun Survey
ARCO OIL & GAS COMPANY

Well number : EMPIRE ABO "K" NO.

Date : 24-MAY-95

Measured Depth	Vertical Depth	Vert. Section	Inc Deg	Azimuth Deg	Coordinates Latitude	Coordinates Departure	D-leg /100ft
0.0	0.00	0.0	0.00	0.00	0.00	0.00	0.00
100.0	100.00	-0.1	0.26	336.94	0.21	-0.09	0.26
200.0	200.00	-0.3	0.24	338.11	0.61	-0.26	0.02
300.0	300.00	-0.6	0.31	329.92	1.04	-0.47	0.08
400.0	400.00	-1.1	0.41	315.24	1.53	-0.86	0.14
500.0	499.99	-1.7	0.48	316.06	2.08	-1.40	0.07
600.0	599.99	-2.5	0.60	308.21	2.71	-2.10	0.14
700.0	699.98	-3.6	0.77	290.57	3.27	-3.14	0.27
800.0	799.97	-5.1	1.00	281.40	3.68	-4.63	0.27
900.0	899.94	-7.3	1.47	287.75	4.24	-6.70	0.49
1000.0	999.90	-10.0	1.75	293.11	5.23	-9.33	0.32
1100.0	1099.86	-12.9	1.76	300.33	6.61	-12.06	0.22
1200.0	1199.81	-15.8	1.82	301.42	8.21	-14.74	0.07
1300.0	1299.76	-18.7	1.84	305.46	9.97	-17.40	0.13
1400.0	1399.71	-21.6	1.85	307.40	11.88	-19.99	0.06
1500.0	1499.65	-24.4	1.86	309.17	13.89	-22.53	0.06
1600.0	1599.60	-27.2	1.84	309.49	15.93	-25.03	0.02
1700.0	1699.55	-30.0	1.85	306.69	17.92	-27.56	0.09
1800.0	1799.50	-32.9	1.90	305.11	19.84	-30.21	0.07
1900.0	1899.44	-35.9	1.84	298.32	21.55	-32.98	0.23
2000.0	1999.39	-39.0	1.80	295.41	22.99	-35.82	0.10
2100.0	2099.34	-42.0	1.76	292.14	24.24	-38.66	0.11
2200.0	2199.30	-44.9	1.63	289.34	25.29	-41.42	0.15
2300.0	2299.26	-47.7	1.61	285.57	26.14	-44.12	0.11
2400.0	2399.22	-50.5	1.65	289.24	26.99	-46.83	0.11
2500.0	2499.18	-53.4	1.77	292.86	28.06	-49.61	0.16
2600.0	2599.13	-56.4	1.81	295.13	29.33	-52.46	0.08
2700.0	2699.07	-59.5	1.92	297.43	30.78	-55.38	0.13
2800.0	2799.02	-62.7	1.98	298.76	32.38	-58.38	0.07
2900.0	2898.95	-66.0	2.09	300.78	34.14	-61.46	0.13
3000.0	2998.88	-69.5	2.18	304.51	36.15	-64.60	0.17
3100.0	3098.81	-72.9	2.29	307.13	38.44	-67.76	0.15
3200.0	3198.72	-76.5	2.41	308.70	40.96	-70.99	0.14
3300.0	3298.63	-80.3	2.56	310.17	43.71	-74.34	0.16
3400.0	3398.52	-84.2	2.67	310.66	46.67	-77.81	0.11
3500.0	3498.41	-88.3	2.92	310.46	49.84	-81.52	0.25
3600.0	3598.27	-92.8	3.09	311.16	53.27	-85.48	0.17
3700.0	3698.12	-97.4	3.19	310.20	56.84	-89.64	0.11
3800.0	3797.95	-102.2	3.37	313.04	60.64	-93.91	0.24

Inrun Survey
ARCO OIL & GAS COMPANY

Well number : EMPIRE ABO "K" NO. Date : 24-MAY-95

Measured Depth	Vertical Depth	Vert. Section	Inc Deg	Azimuth Deg	Coordinates Latitude (North)	Coordinates Departure (West)	D-leg /100ft
3900.0	3897.77	-107.2	3.50	313.09	64.73	-98.29	0.13
4000.0	3997.58	-112.4	3.68	312.42	68.98	-102.89	0.18
4100.0	4097.36	-117.9	3.94	312.80	73.48	-107.78	0.26
4200.0	4197.11	-123.8	4.17	313.98	78.34	-112.91	0.24
4300.0	4296.82	-129.9	4.48	316.34	83.69	-118.23	0.36
4400.0	4396.50	-136.1	4.72	319.48	89.64	-123.60	0.35
4500.0	4496.15	-142.2	4.80	324.09	96.16	-128.72	0.39
4600.0	4595.77	-148.1	5.19	327.23	103.35	-133.62	0.48
4700.0	4695.33	-154.1	5.63	332.27	111.50	-138.35	0.65
4800.0	4794.80	-159.9	6.14	336.90	120.76	-142.74	0.70
4900.0	4894.21	-165.7	6.29	336.37	130.69	-147.03	0.16
5000.0	4993.62	-171.3	6.22	339.19	140.78	-151.15	0.32
5100.0	5093.05	-176.4	6.04	341.67	150.84	-154.73	0.32
5200.0	5192.48	-181.1	6.11	343.75	160.94	-157.87	0.23
5300.0	5291.91	-185.6	6.21	345.12	171.28	-160.75	0.18
5400.0	5391.34	-189.5	5.96	348.94	181.60	-163.14	0.48
5500.0	5490.80	-192.9	5.88	351.26	191.84	-164.92	0.24
5600.0	5590.29	-196.3	5.64	347.36	201.78	-166.79	0.52
5700.0	5689.84	-199.8	5.15	346.67	210.95	-168.90	0.49
5798.0	5787.48	-202.8	4.73	350.13	219.21	-170.61	0.53

At Bottom Hole Location: Measured Depth = 5798.0 Horiz. Displ. = 277.775 Closure Dir. = 322.107

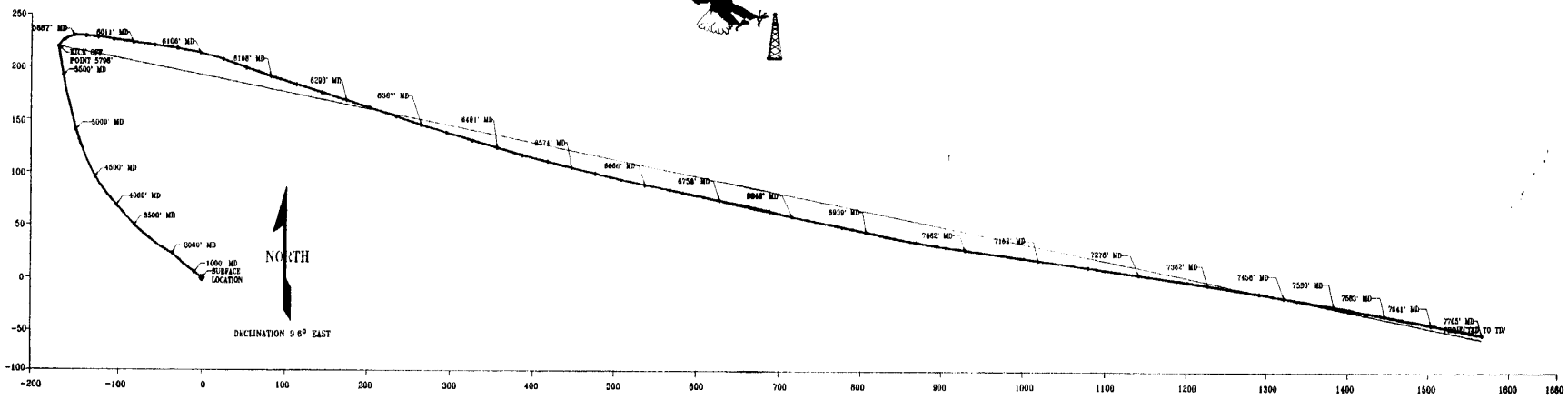
ARCO PERMIAN
EMPIRE ABO UNIT
WELL #K17 RE ENTRY
NW/4 SW/4 SECTION 1 TOWNSHIP 18 SOUTH RANGE 27 EAST
EDDY COUNTY, NEW MEXICO

SCALE 1"=150' PROPOSAL DRAWN @ 99° AZIMUTH FROM KICK OFF POINT

ARCO REP: MR. DOYLE CATES
EAGLE REPS: MIKE PELLESSIER
ROB PORTER
VOGEL REPS: KENNY GEORGE
BOBBY KLEPPER

SIERRA ENGINEERING: MR. PAT DRENNON
MR. C. D. KEMP

EAGLE
DIRECTIONAL SERVICES, INC.



Form 3160-4
(July 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

C/SF

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO. LC-062412 NM-05572

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO. EMPIRE ABO UNIT"K" 17

9. API WELL NO. 30-015-00703

10. FIELD AND POOL, OR WILDCAT EMPIRE ABO

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA 1-18S-27E

1a. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] DRY [ ] Other

b. TYPE OF COMPLETION: NEW WELL [ ] WORK OVER [ ] DEEP-EN [ ] PLUG BACK [ ] DIFF. RESVR. [ ] Other HORIZONTAL EXT

2. NAME OF OPERATOR: ARCO PERMIAN

3. ADDRESS AND TELEPHONE NO.: P.O.BOX 1610, MIDLAND, TX 79702 915 688-5672

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 1980 FSL & 660 FWL (UNIT LETTER L)
At top prod. interval reported below
At total depth: 1928 FSL & 2216 FEL

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: EDDY | 13. STATE: NM

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
05-22-95	06-08-95	06-13-95		

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
7705 MD 6091				X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD): 5797-7705 ABO

25. WAS DIRECTIONAL SURVEY MADE: YES

26. TYPE ELECTRIC AND OTHER LOGS RUN

27. WAS WELL CORED: NO

RECEIVED DEC 13 1995 OIL CON. DIV. DIST. 2

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8 5/8	24	1470	12 1/4	CIRC	0
5 1/2	14	6137	7 7/8	CIRC	0

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8	5906	5772

31. PERFORATION RECORD (Interval, size and number): 5797-7705 OH

ACCEPTED FOR RECORD DEC 4

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5797-7705	A W/1700 GALS

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump)	WELL STATUS (Producing or shut-in)
06-13-95		

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL - BBL.	GAS - MCF.	WATER - BBL.	GAS - OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL - BBL.	GAS - MCF.	WATER - BBL.	OIL GRAVITY - API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS: DIRECTIONAL SURVEY

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Ken W Gosnell TITLE AGENT DATE 11-16-95

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH

N.M. Oil Cons. Division
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation: 8910138010
8. Well Name and No.: Empire Abo Unit "K" 17
9. API Well No.: 30-015-00703
10. Field and Pool, or exploratory Area: Empire Abo
11. County or Parish, State: Eddy NM

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other
2. Name of Operator: ARCO Permian
3. Address and Telephone No.: P.O. Box 1089, Eunice, NM 88231 505-394-1649
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): Unit Letter L, 1980' FSL & 660' FWL, Section 1, T18S, R27E

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[ ] Subsequent Report	[X] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

TD: 6137' PBD: 6101' PERFS: 5800-7705'

MIRUPU. POH w/rods & pmp. NDWH. NUBOP. Release TAC @ 5705'. POH w/tbg & TAC.
RIH w/4-3/4" bit & scraper to top of whipstock @ 5782'. POH.
RUWL. GIH w/CIBP & set @ 5770'. POH.
GIH & perf w/2JSPF 5472-5736'. POH. GIH w/PPI tools & breakdown perfs f/5472-5736' w/50 gals/ft. 15% HCL NEFE. POH.
RIH w/bull plugged MA, perf sub, SN & 2-3/8" tbg. Land SN at +/- 5736'.
NDBOP. NUWH. Swab for test. GIH w/GA, pmp & rods. Hang well on. RDPU. RTP.

APPROVED

14. I hereby certify that the foregoing is true and correct
Signed [signature] Title Sr. Administrative Assistant Date 01/08/02

(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statem or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-104A
March 19, 2001

Submit 1 copy of the final affected wells list along with 1 copy of this form per number of wells on that list to appropriate District Office

Change of Operator

Previous Operator Information:		New Operator Information:	
		Effective Date:	12/31/2001
OGRID:	000900	New Ogrid:	000778
Name:	ARCO Permian	New Name:	BP America Production Company
Address:	P.O. Box 3092	Address:	P.O. Box 3092
Address:		Address:	
City, State, Zip:	Houston, Texas 77253	City, State, Zip:	Houston, TX 77253

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the attached list of wells is true and complete to the best of my knowledge and belief.

New Operator Signature: Mary Corley

Printed name: Mary Corley

Title: Sr. Regulatory Specialist

Date: 12/10/2001 Phone: 281-366-4491

RECEIVED
OCD - ARTESIA

Previous operator complete below:

Previous Operator: ARCO Permian

Previous OGRID: 000990

Signature: Mary Corley

Printed Name: Mary Corley

NMOCD Approval

Signature: Jim W. Sum

Printed Name: District Supervisor

District:

Date: FEB 07 2002

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM0557371
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement Designation: 8910138010
8. Well Name and No.: Empire Abo Unit "K" 17
9. API Well No.: 30-015-00703
10. Field and Pool, or exploratory Area: Empire Abo
11. County or Parish, State: Eddy NM

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other
2. Name of Operator: BP America Production Company
3. Address and Telephone No.: P.O. Box 1089, Eunice, NM 88231 505-394-1649
4. Location of Well (Footage, Sec., T., R., M., or Survey Description): Unit Letter L, 1980' FSL & 660' FWL, Section 1, T18S, R27E

RECEIVED ARTESIA

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other Workover	[ ] Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

TD: 6137' CIBP: 5770' PERFS: 5472-5736'

05.30.02: Unset pmp & TOH w/rods & pmp. NDWH. NUBOP. Unsetat TAC & POH w/tbg.
05.31.02: TIH w/bit & scraper. Testing tbg to 5000# psi below slips. Tag @ 5780'. TOH.
06.03.02: RU & perf 2 JSPF 5472-79', 5492-94', 5498-5516', 5527-29', 5540-48', 5565-75', 5580-86', 5591-97', 5613-17', 5638-59', 5540-58', 5565-75', 5580-86', 5591-97', 5613-17', 5638-59', 5710-15', 5722-36', 230 holes. TIH w/treating pkr. Set @ 5383'.
06.04.02: Drop SV. RU & pmp 20 bbls 7.5% HCL to pickle tbg. Swab back acid. Fish SV. Pmp 5,150 gals 15% HCL w/350 ball sealers. TOH w/pkr. SION.
06.05.02: TIH w/3-3/4" bailer & recover ball seals. TOH. TIH w/production tbg. Set @ 5704'. SN @ 5720'. NDBOP. Set TAC NUWH.
06.07.02: Load & test to 500# psi. Held OK. In 24 hrs pmp 0 BO, 1 BW, 2 MCF.

ACCEPTED FOR RECORD
JUN 21 2002
LES BABYAK
PETROLEUM ENGINEER

14. I hereby certify that the foregoing is true and correct
Signed [signature] Title Sr. Administrative Assistant Date 06.18.02

(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statem or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

30-015-[redacted]03

[redacted]

466850-W
2811047-G
2811057-O
2812373-G

DD-105(H)
Appv 1-18-95

[redacted]

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

EC

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMNM0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM70945X

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
EMPIRE ABO K 17

2. Name of Operator
BP AMERICA PRODUCTION CO

Contact: KELLIE D. MURRISH
E-Mail: murrikd@bp.com

9. API Well No.
30-015-00703-00-S1

3a. Address
~~HOUSTON, TX 77253~~ Eunice, NM 88231

3b. Phone No. (include area code)
Ph: 505.394.1649
Fx: 505.394.1624

10. Field and Pool, or Exploratory
EMPIRE

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 1 T18S R27E NWSW 1980FSL 660FWL

RECEIVED
NOV 19 2004
OCD-ARTESIA

11. County or Parish, and State
EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☒ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

TD: 6137' PBD: 5770' CIBP PERFS: 5472-5736'

SET CIBP @ 5442' W/35' CMT ON TOP
CIRC HOLE W/PKR FLUID
TEST TO 500# FOR 30 MINS. CUT CHART
IDLE WELL

ATTACHMENT: WELLBORE SCHEMATIC EAU-N-901

* Perform MIT + submit justification for TA status.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #35932 verified by the BLM Well Information System
For BP AMERICA PRODUCTION CO, sent to the Carlsbad
Committed to AFMSS for processing by ARMANDO LOPEZ on 09/10/2004 (04AL0355SE)

Name *(Printed/Typed)* KELLIE D. MURRISH — Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) — Date 09/10/2004

Accepted for Record - NMOCD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By **/s/ Joe G. Lara** — Title Petroleum Engineer — NOV 16 2004

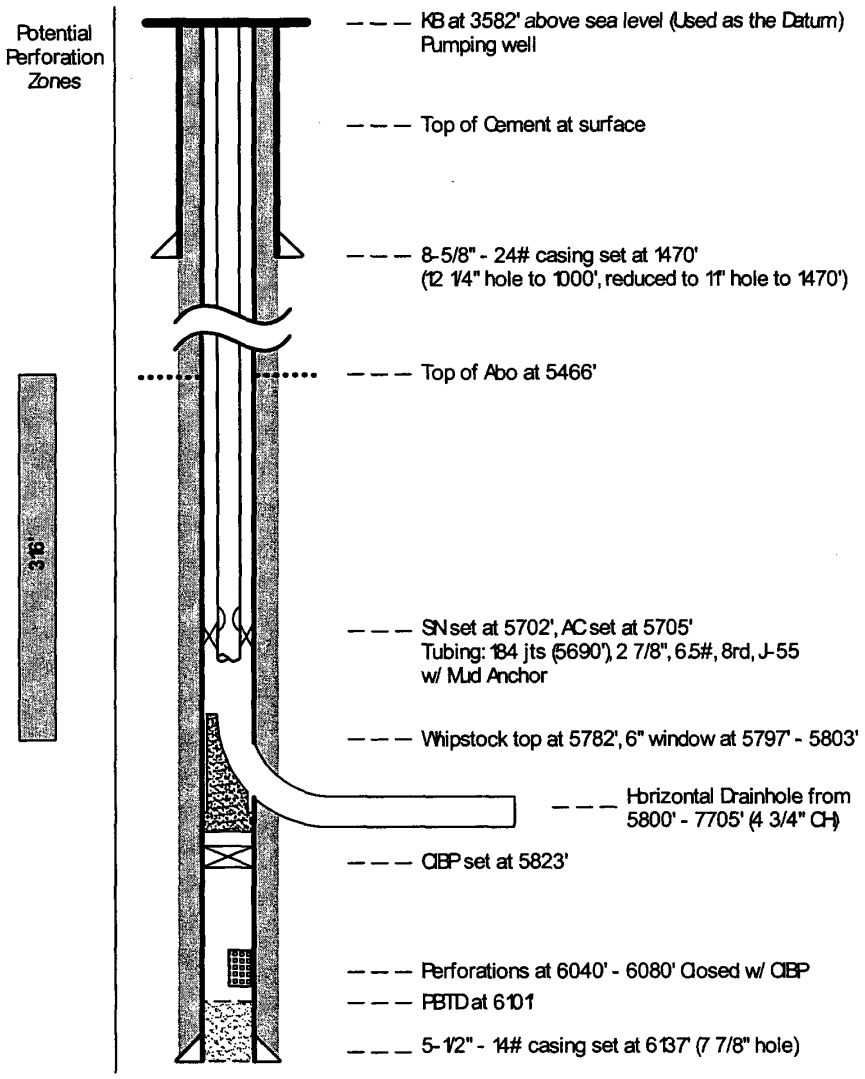
* Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office CARLSBAD FIELD OFFICE

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Empire Abo Unit "K" 17



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

29-Jul-05

BP AMERICA PRODUCTION COMPANY
PO Box 1089
Eunice NM 88231-0000

NOTICE OF VIOLATION - Inactive Well(s)

Dear Operator:

A review of our records and recent inspection(s) indicate that the subject well(s) has been shut-in for an extended period of time. Rule 201 of the Rules and Regulation of the Oil Conservation Division provides that a well may be shut-in no longer than sixty days after suspension of drilling operations, upon determining that ther well is no longer usable (e.g., a dry hole), or one year after last production. To comply with guidelines as established in the Rules and Regulations, corrective actions must be taken immediately and the well(s) brought into compliance.

The detail section below indicates preliminary findings and/or probable nature of the violation.

The following options are available:

1. Immediately restore the well(s) to production, injection or disposal as applicable.
2. Request 'Temporary Abandoned' status pursuant to Rule 203, which requires that you set a plug and conduct a mechanical integrity test.
3. Submit a proposal to 'Plug and Abandon' the well(s) pursuant to Rule 202, proceed with plugging procedures on a timely basis after the proposal has been evaluated, amended and/or approved.

In the event that a satisfactory response is not received to this letter of direction by the "Corrective Action Due By:" date shown above, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of CIVIL PENALTIES for your violation of OCD rules.

IDLE WELL INSPECTION DETAIL SECTION

EMPIRE ABO UNIT 017A L-1-18S-27E **30-015-00703-00-00** **Inspection No.** iCLB0521037721

Inspection Date: 7/29/2005 10:28:39 AM **Corrective Action Due by: 11/1/2005**

Type Inspection	Inspector	Violation?	*Significant Non-Compliance?
Routine/Periodic	Chris Beadle	Yes	No

Comments on Inspection: idle Well (Rule 201). No flowline attached, no production equipment on site. Last reported production was December 2002. Marker approximately 15 feet from wellhead for new well (AAO Federal 9).

Thank you for your prompt attention to this matter and your efforts in helping to protect our environment and the infrastructure of the oil and gas industry.

Sincerely,

Artesia OCD District Office

* Significant Non-Compliance events are reported directly to the U.S. Environmental Protection Agency, Region VI, Dallas, Texas.

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

RECEIVED
OCT 1 1 2005
OCD-ARTESIA

5. Lease Serial No.
NMNM0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
EMPIRE ABO UNIT 17 'K'

2. Name of Operator
BP America Production Company

9. API Well No.
30.015.00703

3a. Address
P.O. Box 1089 Eunice NM 88231

3b. Phone No. (*include area code*)
505.394.1600

10. Field and Pool, or Exploratory Area
EMPIRE ABO

4. Location of Well (*Footage, Sec., T., R., M., or Survey Description*)
NWSW, SEC 1, T18S, R27E, 1980' FSL & 660' FWL

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[X] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[ ] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[ ] Final Abandonment Notice	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[X] Other IDLE WELL
	[ ] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

TD: 6137' PBD: 6101' VERTICAL PERFS: 5472-5736' CIBP: 5823'
WHIPSTOCK PERFS: 040-6080'

BP America Production Company requests a 60 day extention for the Notice of Violation - Idle Well issued by the New Mexico Oil Conservation Commission. The Corrective Action Due Date for this notice is 11.01.05.

The current scope of work includes testing the previous perfs @ 6050-6080 by:

MIRUPU
POH RODS & EQUIP
REMOVE WHIPSTOCK & CIBP
RIH W/PKR ASSY & SET BELOW HORIZONTAL SECTION
TEST LOWER PERFORATED INTERVAL
EVALUATE FINDINGS FROM LOWER ZONE

Accepted for record - NMOCD

14. I hereby certify that the foregoing is true and correct
Name (*Printed/Typed*)
Kellie D. Murrish

Title
Scheduler

Date 10.07.05

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

RECEIVED
OCT 18 2005
OCD-ARTESIA

5. Lease Serial No.
NMNM0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
EMPIRE ABO UNIT 17
'K'

2. Name of Operator
BP America Production Company

9. API Well No.
30.015.00703

3a. Address
P.O. Box 1089 Eunice NM 88231

3b. Phone No. (*include area code*)
505.394.1600

10. Field and Pool, or Exploratory Area
EMPIRE ABO

4. Location of Well (*Footage, Sec., T., R., M., or Survey Description*)
NWSW, SEC 1, T18S, R27E, 1980' FSL & 660' FWL

11. County or Parish, State
EDDY NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[X] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[ ] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[X] Other IDLE WELL
[ ] Final Abandonment Notice	[ ] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

TD: 6137' PBD: 6101' VERTICAL PERFS: 5472-5736' CIBP: 5823'
WHIPSTOCK PERFS: 040-6080'

BP America Production Company requests a 60 day extention for the Notice of Violation - Idle Well issued by the New Mexico Oil Conservation Commission. The Corrective Action Due Date for this notice is 11.01.05.

The current scope of work includes testing the previous perfs @ 6050-6080 by:

MIRUPU
POH RODS & EQUIP
REMOVE WHIPSTOCK & CIBP
RIH W/PKR ASSY & SET BELOW HORIZONTAL SECTION
TEST LOWER PERFORATED INTERVAL
EVALUATE FINDINGS FROM LOWER ZONE

APPROVED FOR 2 MONTH PERIOD
ENDING 12/15/05

14. I hereby certify that the foregoing is true and correct
Name (*Printed/Typed*)
Kellie D. Murrish

Title
Scheduler

Date 10.07.05

Accepted for record - NMOCD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (ORIG. SGD.) ALEXIS C. SWOBODA
Title PETROLEUM ENGINEER
Date OCT 13 2005

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office RFO

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DEC 10 2008
OCD-ARTESIA

OCD ARTESIA

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No
NMNM0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM70945X

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
Empire Abo Unit 17 K

2. Name of Operator
BP America Production Company

9. API Well No.
30-015-00703

3a. Address
P.O. Box 1089 Eunice NM 88231

3b. Phone No. *(include area code)*
575-394-1648

10. Field and Pool, or Exploratory Area
Empire Abo

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Unit Letter L, 1980 FSL & 660 FWL
Section 1, T18S, R27E

11. County or Parish, State
Eddy NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[X] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[ ] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[ ] Final Abandonment Notice	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[ ] Other _____
	[ ] Change Plans	[X] Plug and Abandon	[ ] Temporarily Abandon	
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13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.) * Remove Retrievable whipstock. place adequate cmt to cap CIBP - Top of window. WOC Tag. (5823 - 5782)

1. MIRU PU. Check tubing, casing and surface pipe for pressure - bleed off into containment. Kill well as necessary. Monitor well and assure it's stable. POH LD/warehouse rods and pump.
2. Monitor well and assure it is stable. ND WH, NU BOP. Release TAC and TOH.
3. * TIH with CIBP on 2 3/8" tubing and set at 5420'. Spot 250' cement plug on top of CIBP using 25 sx Class C neat. PU to 5150'. Load hole with mud-laden fluid (9 ppg, 1250# gel/100 bbl).
4. TOH to 3400' (Glorieta top = 3290'). Spot 25 sack balanced cement plug from 3400' - 3150'. TOH.
5. TIH with bull plug and perf nipple on tubing. Tag Glorieta plug; re-spot if necessary.
6. TOH to 1550' (8 5/8" surface casing shoe = 1470'). Spot 35 sack balanced cement plug from 1550' - 1200'. PU and WOC 2 hours. Tag plug, re-spot if necessary.
7. TOH to 300' (Yates top = 172'). Fill 5 1/2" casing from 300' to surface with 30 sx Class C neat. TOH LD tubing.
8. RD PU.
9. Dig out WH and cut-off casingheads to 3' below GL.
10. Install regulation dry-hole marker. Clean location and prepare location for BLM inspections.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

ACCEPTED FOR RECORD

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
Barry C. Price

Title
Area Operations Team Lead

Barry C. Price

DEC 10 2008

Date 11/18/08

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

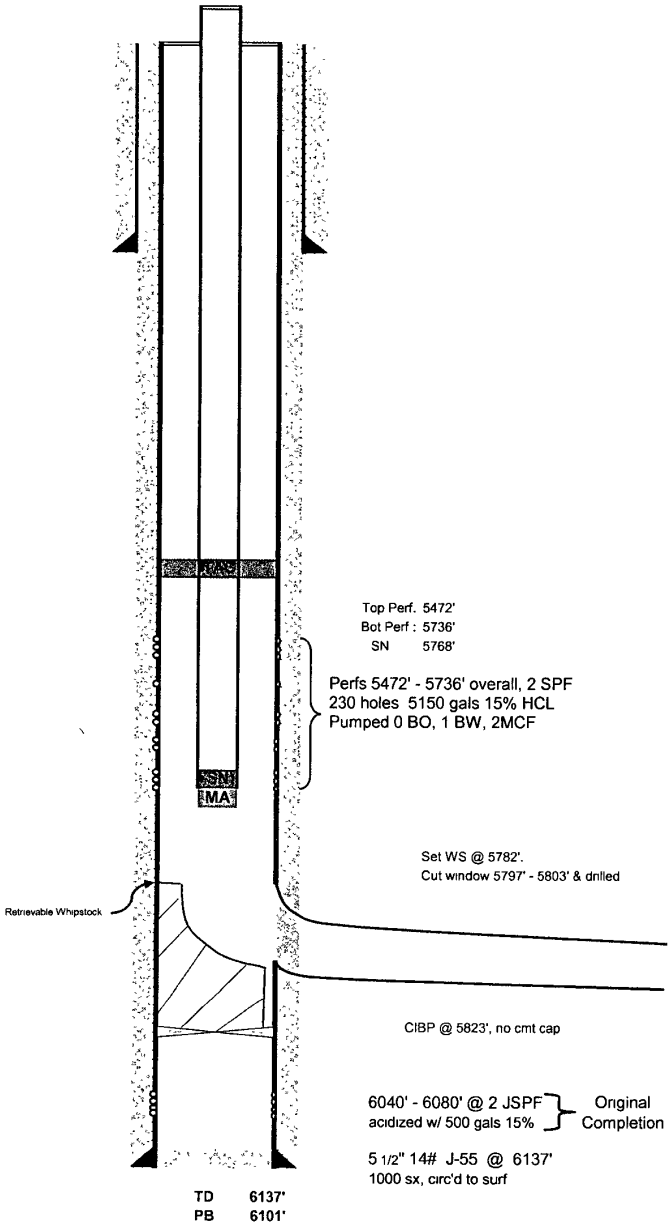
Date
DEC 1 2008

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

APPROVED
JAMES A. AMOS
SUPERVISOR-EPS

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Existing WB Dia		Empire Abo Unit K-17			
Status	Producing		Operator	BP America	
Lease	Empire Abo Unit		Zone	0	
Field	0		API	30-015-00703	
NMOCD	Empire Abo Unit K-17		NMOCD		
Location	1980' FSL & 660 FWL, S-01 T-18S R-27E				
Reference					
KB	3,582	TVD	6137'	PBTD	6101'
GL	3,569	MTD		Last CIBP	5770'

Casing	Weight/Grade	Depth	Cmt Sx	Hole	TOC
8 5/8"	24#/J-55	1468	750 sx	11"	surf
5 1/2"	15.5#/J-55	6137	1000 sx	7 7/8"	surf
0	0	0	0	0	0
Spud	3/26/1959		Top Perf	5472'	
Completion	4/20/1959		Bot Perf	5736'	

Perforation History

5472'-5736' (behind cibp.6040' - 6080')

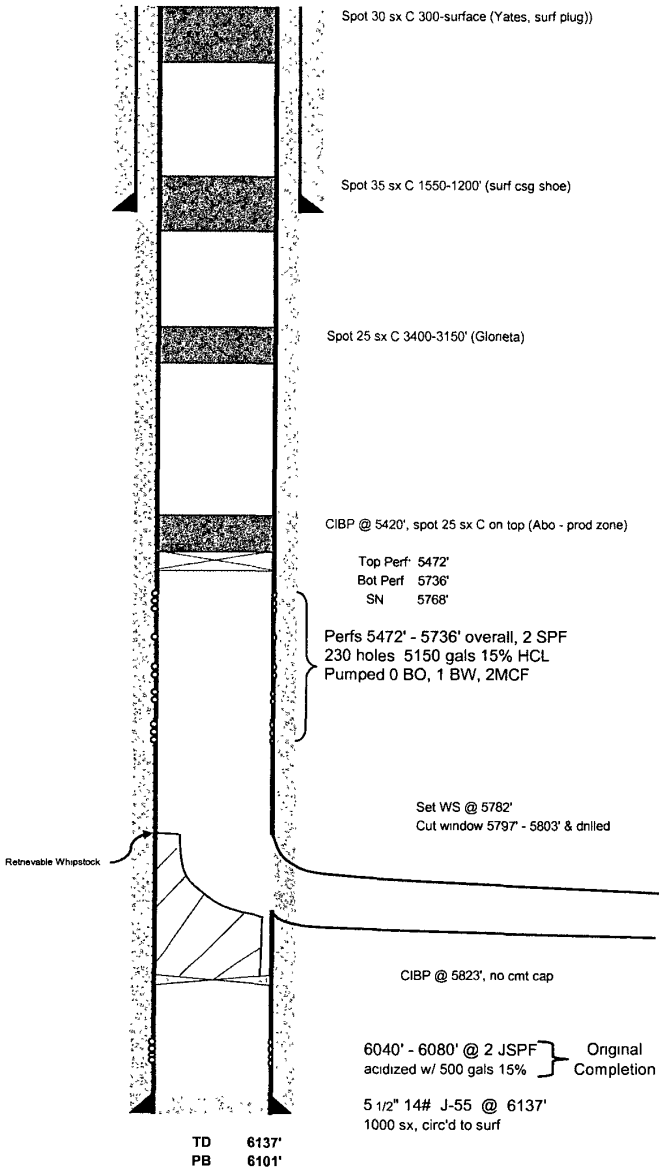
Packers, Plugs, and Cement

CIBP @ 5770', 5823'

Current Tubulars: Blue boxes use drop down boxes for descriptions

Date sketch checked	2/11/08	by		
Date tubulars checked		by		

Tubing and Rod Assembly			length, ft	Top of Depth from KB, ft
# Jnts	Description of TBG Assembly	RKB	12 00	
173	2 3/8" 4.7# J-55 EUE, 8 Rnd Tbg		5448 98	12 00
1	2 3/8" X 5.5" OD TAC		2 75	5460 98
9	2.3/8" 4.7# J-55 EUE 8 Rnd Tbg		272 65	5463 73
1	2 3/8" 4.7# J-55 EUE 8 Rnd IPC Tbg		32 46	5736 38
1	2.3/8" API SN		1 10	5768.84
1	3 1/2" 9.5# J-55 Slotted MA w/Bull Plug		25 68	5769 94
				5795 62
				5795 62
				5795.62
				5795 62
				5795.62
				5795 62
				5795 62
	Current Rod Design			
# Rods	Description of Rod Assembly	RKB	12 00	
1	1 1/4" Dia X 22' PR w/1 1/2" X 16' PR liner		22 00	12.00
112	1.00" FG Rods with Couplings		4200 00	34.00
40	7/8" Dia "C" Rods		1000 00	4234 00
19	1 5/8" "C" Sinker Bars		475 00	5234.00
1	1 5/8" "C" Sinker Bars		25 00	5709 00
1	Pump with gas anchor		36.00	5734.00
				5770 00
				5770 00
				5770 00
				5770 00
				5770 00
	2 0 x 1 5 x 26' w/ gas stinger anchor 1"x10'			5770 00
				5770 00



Proposed WB Dia			Empire Abo Unit K-17		
Status	Producing		Operator	BP America	
Lease	Empire Abo Unit		Zone	0	
Field	0		API	30-015-00703	
NMOCD	Empire Abo Unit K-17		NMOCD		
Location	1980' FSL & 660 FWL, S-01 T-18S R-27E				
Reference					
KB	3,582	TVD	6137'	PBTD	6101'
GL	3,569	MTD		Last CIBP	5770'

Casing	Weight/Grade	Depth	Cmt Sx	Hole	TOC
8 5/8"	24#/J-55	1468	750 sx	11"	surf
5 1/2"	15.5#/J-55	6137	1000 sx	7 7/8"	surf
0	0	0	0	0	0
Spud	3/26/1959		Top Perf	5472'	
Completion	4/20/1959		Bot Perf	5736'	

Perforation History

5472'-5736' (behind cibp.6040' - 6080')

Packers, Plugs, and Cement.

Whipstock 5782-5812', CIBP @ 5823'

Current Tubulars: Blue boxes use drop down boxes for descriptions

Date sketch checked	2/11/08	by:		
Date tubulars checked		by:		

Tubing and Rod Assembly			length, ft	Top of Depth from KB, ft
# Jnts	Description of TBG Assembly	RKB	12 00	
173	2 3/8" 4.7# J-55 EUE 8 Rnd Tbg		5448 98	12 00
1	2 3/8" X 5.5" OD TAC		2 75	5460 98
9	2 3/8" 4 7# J-55 EUE 8 Rnd Tbg		272 65	5463.73
1	2 3/8" 4.7# J-55 EUE 8 Rnd IPC Tbg		32.46	5736 38
1	2 3/8" API SN		1 10	5768 84
1	3 1/2" 9.5# J-55 Slotted MA w/Bull Plug		25 68	5769 94
				5795 62
				5795 62
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				5795.62
				5795.62
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				5795.62
	Current Rod Design			
# Rods	Description of Rod Assembly	RKB	12 00	
1	1 1/4" Dia X 22' PR w/1 1/2" X 16' PR liner		22 00	12 00
112	1 00" FG Rods with Couplings		4200 00	34 00
40	7/8" Dia "C" Rods		1000 00	4234 00
19	1 5/8" "C" Sinker Bars		475 00	5234.00
1	1 5/8" "C" Sinker Bars		25.00	5709.00
1	Pump with gas anchor		36 00	5734.00
				5770 00
				5770 00
				5770 00
				5770 00
				5770 00
	2 0 x 1 5 x 26' w/ gas stinger anchor 1"x10'			5770 00
				5770.00

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Permanent Abandonment of Federal Wells
Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within **ninety (90)** days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

2. **Notification: Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.**

3. Blowout Preventers: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. Mud Requirement: Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of water. Minimum nine (9) pounds per gallon.

5. Cement Requirement: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. In lieu of a cement plug in a cased hole, a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. Dry Hole Marker: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).

7. Subsequent Plugging Reporting: Within 30 days after plugging work is completed, file one original and five copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**

8. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration conditions of approval will be developed and furnished to you.

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FEB 18 2009

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5 Lease Serial No.
NMNM0557371

6 If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No
NMNM70945X

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8 Well Name and No
Empire Abo Unit 17
K

2. Name of Operator
BP America Production Company

9. API Well No
30-015-00703

3a. Address
P.O. Box 1089 Eunice NM 88231

3b. Phone No. (*include area code*)
575-394-1648

10. Field and Pool, or Exploratory Area
Empire Abo

4. Location of Well (*Footage, Sec, T., R, M., or Survey Description*)
Unit Letter L, 1980 FSL & 660 FWL
Section 1, T18S, R27E

11. County or Parish, State
Eddy NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[ ] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[X] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[ ] Final Abandonment Notice	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[X] Other Remove CIBP
	[ ] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13 Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones Attach the Bond under which the work will be performed or provide the Bond No on file with BLM/BIA Required subsequent reports shall be filed within 30 days following completion of the involved operations If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection)

SUBSEQUENT REPORT FOR THIS WORK WAS INADVERTENTLY OVERLOOKED AND BP FAILED TO FILE OR NOTIFY OF RTP. REPORT NOW BEING SUBMITTED TO UPDATE BLM RECORDS. 1/20/06: MIRUPU. Unseat pump lay down 66-1' rods, 69 7/8' rods, 82 3/4' rods, 10 7/8' rods w/ g & pump. Prep to NU BOP. 1/23/06: NDWH NU BOP release TAC laydown prod tbg. 1/24/06: TIH w/ 4 3/4' bit picking up 66 jt 2 7/8 DP & 2 7/8 tbg workstring to 5100'. 1/25/06: RU foam air unit break circ w/ air TIP tag CIBP @ 5768' by our SLM. RU power swivel start drlg on CIBP. Plug turned loose in 2 hr. Push to 5779' circ clean w/ foam air blow well down. 1/26/06: TIH push CIBP to end of horizontal @ 7700' TOH laydown 2 7/8". 1/27/06: Pick up hook, bumper sub, jars, & 4 3 1/2" DC - TIH w/tbg fish for Whipstock from 5736 5862' no bite. TOH w/ hook prep to run box tap. 1/30/06: TIH w/ box tap, BS, Jars, 4 3 1/2" DC & tbg tag whipstock @ 5806' work over fish try to work whipstock loose kept pulling off. TOH WOO. 1/31/06: Rig down foam air unit & power swivel - laydown DC - TIH w/ work string & laydown same - chg out tbg & BOP rams. 2/1/06: Pickup 2 3/8 prod tbg test in hole 5000 psi below slips. 2/2/06: ND BOP NUWH. Pickup pump & new rod design space well out left 7' of polish rod out load & test to 500 psi-ok - no pump action - unseat pump flush 10 bbl water - load test to 500 psi-ok-still no pump action. 2/3/06: TOH w/ rods & pump. Run swab to ck fluid level dry. WOO. 2/6/06: Pump 30 bbl while adding 2 jt to lower SN to 5769' swab test no fluid. 2/7/06: Swab test still no fluid. 2/8/06: Run pump & rods L&T to 500 psi-ok. RD. RTP well test 11/5/06-6 mcf gas, 8 bbls oil, 1 bbl water.

14 I hereby certify that the foregoing is true and correct
Name (*Printed/Typed*)
Barry C. Price

Title
Area Operations Team-Leader

Date 2/2/09

ACCEPTED FOR RECORD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date FEB 16 2009

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

Office

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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FOR RECORDS ONLY

OCD-ARTESIA

MAR 30 2009

Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No. NMNM0557371

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

7. If Unit of CA/Agreement, Name and/or No. NMNM70945X

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No. EMPIRE ABO UNIT K 17

2. Name of Operator BP AMERICA PRODUCTION COMPANY

9. API Well No. 30-015-00703

3a. Address P.O. BOX 1089, EUNICE NM 88231

3b. Phone No. *(include area code)* 575-394-1648

10. Field and Pool or Exploratory Area EMPIRE ABO

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
UNIT LETTER L, 1980 FSL & 660 FWL, SECTION 1, T18S, R27E

11. Country or Parish, State EDDY NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☑ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other _____
	☐ Change Plans	☑ Plug and Abandon	☐ Temporarily Abandon	_____
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	_____

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3/12/09: ND WH. RELEASE TAC. NU BOP. POH LAYING DOWN TBG.
3/13/09: RIH W/ 4 3/4" BIT, CSG SCRAPER & 185 JTS 2 3/8" TBG TO 5787'. POH W/ TBG TO 3523'.
3/16/09: KILL WELL W/ 20 BBL BRINE. POH W/ 2 STANDS TBG. POH W/ TBG & SCRAPER. LAY DOWN SCRAPER. RIH W/ CIBP & TBG. SET CIBP @ 5770'. PUMP 25 BBL FRESH WATER ON VACUUM. PUMP 20 SX CMT ON VACUUM. DISPLACED W/ 20 BBL FRESH WATER ON VACUUM. POH LAYING DOWN 11 JTS TBG. FLUSH TBG W/ 10 BBL FRESH WATER ON VACUUM.
3/17/09: POH W/ TBG. RIH W/ CIBP & 2 3/8" TBG. SET CIBP @ 5420'. DISPLACE CSG W/ FRESH WATER. TEST TO 500 PSI. TEST GOOD. SPOT 25 SX CMT FROM 5420' TO 5179'. LAY DOWN 8 JTS TBG. DISPLACE CSG FROM 5160' TO SURFACE. POH LAYING DOWN TBG TO 3416'. SPOT 25 SX CMT FROM 3416' TO 3175'. POH W/ TBG & SETTING TOOL. RIH W/ SLOTTED SUB ON 2 3/8" TBG.
3/18/09: RIH W/ TBG. TAG CMT @ 3152'. LAY DOWN 51 JTS TBG TO 1566'. MIX & PUMP 170 SX CMT FROM 1566' TO SURF. POH LAYING DOWN TBG. ND BOP. TOP OFF CSG W/ 5 SX CMT. RD.
3/19/09: DIG OUT AROUND WELLHEAD. CUT OFF ALL ANCHORS AND WELL HEAD, WELD IN PLATE, 1" NIPPLE & VALVE, DRY HOLE MARKER, BACKFILL AND LEVEL LOCATION.

Approved as to plugging of the well bore. Liability under bond is retained until Surface restoration is completed.

14. I hereby certify that the foregoing is true and correct.
Name *(Printed/Typed)* BARRY C. PRICE

Title AREA OPERATIONS TEAM LEAD

Signature Barry C. Price

Date 03/23/2009

APPROVED
MAR 26 2009
JAMES A. AMOS
SUPERVISOR-EPS

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

3/31/09

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA
APR 15 2009

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

LM

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
NMNM0557371

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM70945X

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
Empire Abo Unit 17
K

2. Name of Operator
BP America Production Company

9. API Well No.
30-015-00703

3a. Address
P.O. Box 1089 Eunice NM 88231

3b. Phone No. (*include area code*)
575-394-1648

10. Field and Pool, or Exploratory Area
Empire Abo

4. Location of Well (*Footage, Sec, T, R., M., or Survey Description*)
Unit Letter L, 1980 FSL & 660 FWL
Section 1, T18S, R27E

11. County or Parish, State
Eddy NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[ ] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
[ ] Subsequent Report	[ ] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[X] Final Abandonment Notice	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[ ] Other _____
	[ ] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	
	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Per BLM letter referencing this well, dated March 27, 2009, all requirements have been met for final abandonment.

APPROVED
APR 11 2009
JAMES A. AMOS
SUPERVISOR-EPS

4/16/09

14. I hereby certify that the foregoing is true and correct
Name (*Printed/Typed*)
Barry C. Price

Title
Area Operations Team Lead

Date 4/7/09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon	Office	

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