RM

OCD-ARTESIA

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NMOCD ARTESIA

ATS-10-224

EA-10-326

Form 3160-3
(April 2004)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5 Lease Serial No.
NM0506A - NM 0522A

6. If Indian, Allotee or Tribe Name

1a Type of work: ☑ DRILL ☐ REENTER

7 If Unit or CA Agreement, Name and No

1b. Type of Well ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8 Lease Name and Well No.
Poker Lake Unit #302H

2 Name of Operator
BOPCO, L. P.

9 API Well No.
30-015-37647

3a Address **P. O. Box 2760**
Midland, TX 79702

3b Phone No. *(include area code)*
432-683-2277

10 Field and Pool, or Exploratory
~~Cotton Draw S~~. **(Delaware)** Poker Lake; Del, S

4 Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface **SWNE, UL G, 2200' FNL, 2030' FEL, Lat N32.189406, Long W103.780289**

At proposed prod zone **2118'FNL, 969'FWL, Sec21, T24S, R31E, Lt N32.204144, Lg W103.787681**

11 Sec, T R M or Blk and Survey or Area
Sec 28, T24S, R31E, Mer NMP

14 Distance in miles and direction from nearest town or post office*
17 miles east of Malaga, NM

12 County or Parish
Eddy County

13 State
NM

15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any)
440'

16 No of acres in lease
2805.12

17 Spacing Unit dedicated to this well
280

18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft
2576'

19 Proposed Depth 8407-PH
13654' MD hole
~~14,000~~
8044' TVD

20 BLM/BIA Bond No on file
COB000050

21 Elevations (Show whether DF, KDB, RT, GL, etc)
3484' GL

22 Approximate date work will start*
07/01/2010

23 Estimated duration
30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, shall be attached to this form

1 Well plat certified by a registered surveyor
2 A Drilling Plan
3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office)
4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above)
5 Operator certification
6 Such other site specific information and/or plans as may be required by the authorized officer

25 Signature Annette Childers — Name *(Printed/Typed)* **Annette Childers** — Date 1-15-2010

Title **Regulatory Clerk**

Approved by *(Signature)* **/s/ Don Peterson** — Name *(Printed/Typed)* — Date **FEB 18 2010**

Title **FIELD MANAGER** — Office **CARLSBAD FIELD OFFICE**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached. **APPROVAL FOR TWO YEARS**

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)

Approval Subject to General Requirements & Special Stipulations Attached

Carlsbad Controlled Water Basin

SEE ATTACHED FOR CONDITIONS OF APPROVAL

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 Department

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

Form C-102
Revised October 15, 2009

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-95-37647	~~96757~~ 50386	Poker Lake Cotton Draw S. (Delaware) South

Property Code	Property Name	Well Number
306402	POKER LAKE UNIT	302H

OGRID No.	Operator Name	Elevation
260737	BOPCO, L.P.	3484'

Surface Location

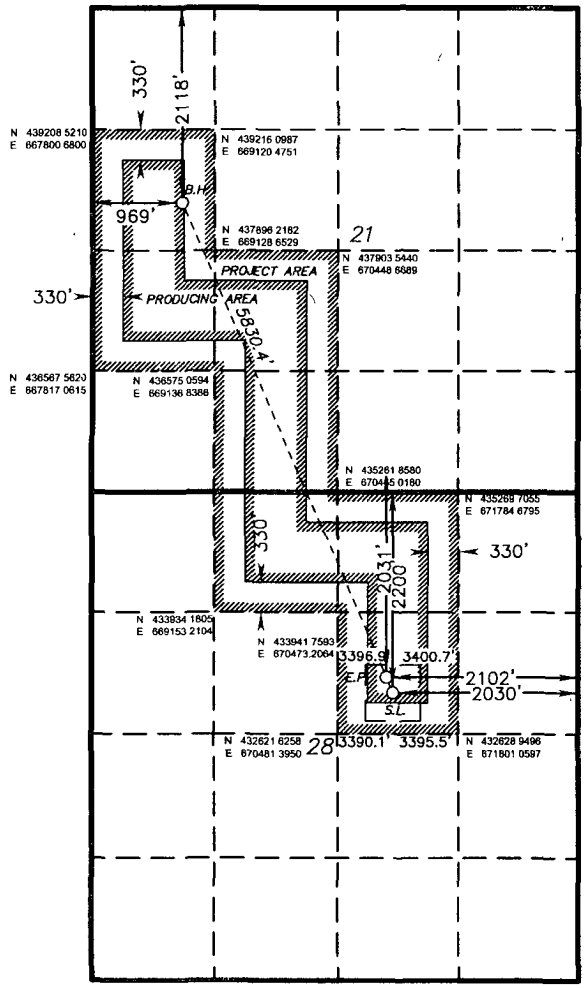
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	28	24 S	31 E		2200	NORTH	2030	EAST	EDDY

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
E	21	24 S	31 E		2118	NORTH	969	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
280	N		

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



PROPOSED BOTTOM HOLE LOCATION
Lat – N 32°12'14.92"
Long – W 103°47'15.65"
NMSPCE– N 438415.902
E 668774.526
(NAD-27)

PROPOSED L. BRUSHY ENTRY POINT
Lat – N 32°11'23.53"
Long – W 103°46'49.88"
NMSPCE– N 433234.22
E 671016.00
(NAD-27)

PROPOSED DELAWARE ENTRY POINT
Lat – N 32°11'21.86"
Long – W 103°46'49.04"
NMSPCE– N 433066.105
E 671088.732
(NAD-27)

SURFACE LOCATION
Lat – N 32°11'21.86"
Long – W 103°46'49.04"
NMSPCE– N 433066.105
E 671088.732
(NAD-27)

OPERATOR CERTIFICATION

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

Signature Date 1/15/10

Gary E. Gerhard
Printed Name

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 belief.

JANUARY 05, 2010
Date Surveyed

Signature & Seal of Professional Surveyor

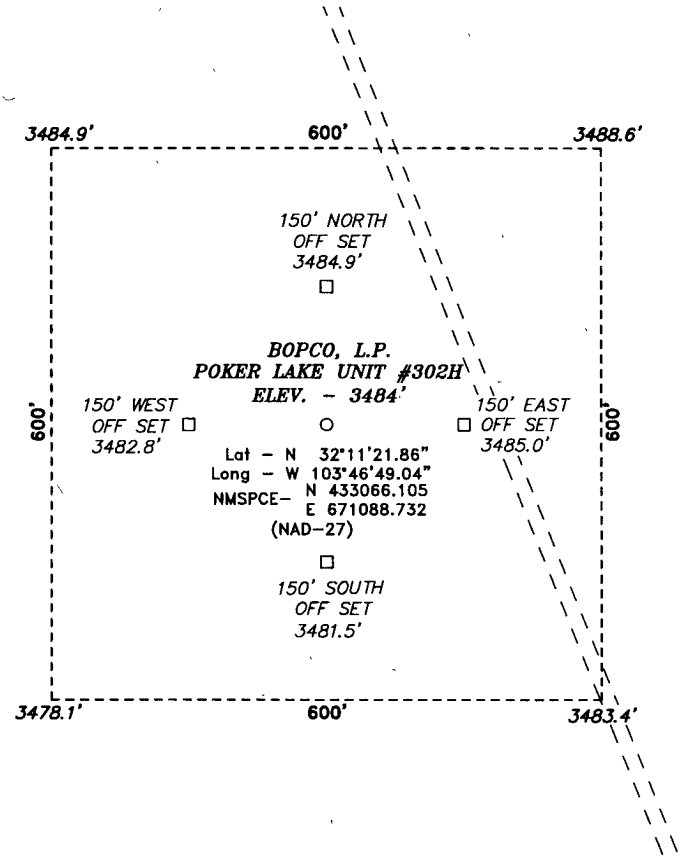
GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL SURVEYOR

NO. 32202

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

SECTION 28, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, **NEW MEXICO.**



200 0 200 400 FEET

SCALE: 1" = 200'

Directions to Location:

FROM THE JUNCTION OF HWY 128 AND BUCK JACKSON GO SOUTHWESTERLY FOR APPROX 5.2 MILES TO THE JUNCTION OF BUCK JACKSON AND BUCK HORN, GO SOUTHERLY ON BUCK HORN FOR 0.3 MILES TO PROPOSED LOCATION.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

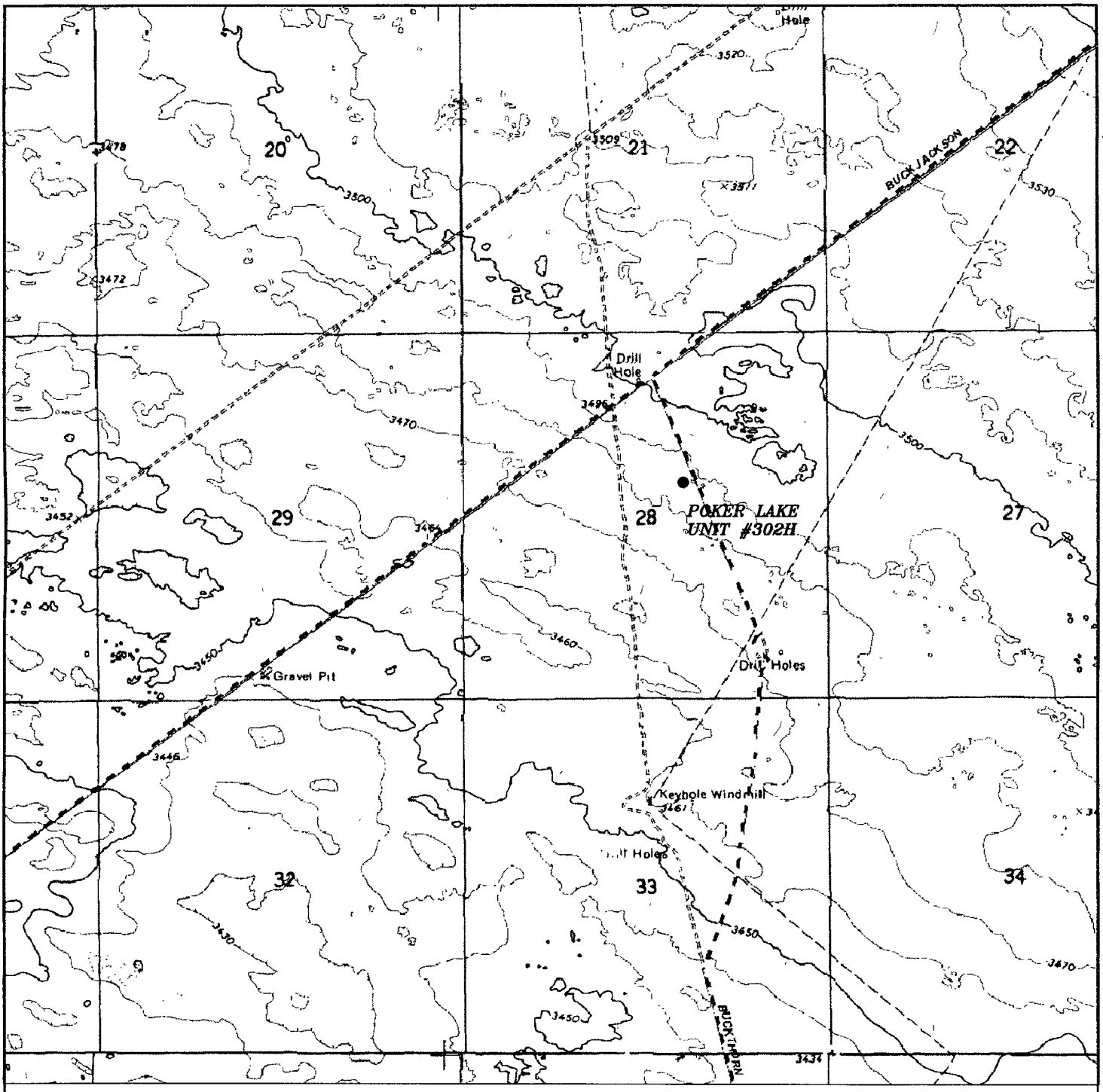
W.O. Number: 22089	Drawn By: J. SMALL
Date: 01-05-2010	Disk: JMS 22089

BOPCO, L.P.

REF: POKER LAKE UNIT #302H / WELL PAD TOPO

THE POKER LAKE UNIT #302H LOCATED 2200' FROM THE NORTH LINE AND 2030' FROM THE EAST LINE OF SECTION 28, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 01-05-2010 | Sheet 1 of 1 Sheets



POKER LAKE UNIT #302H
Located 2200' FNL and 2030' FEL
Section 28, Township 24 South, Range 31 East,
N.M.P.M., Eddy County, New Mexico.

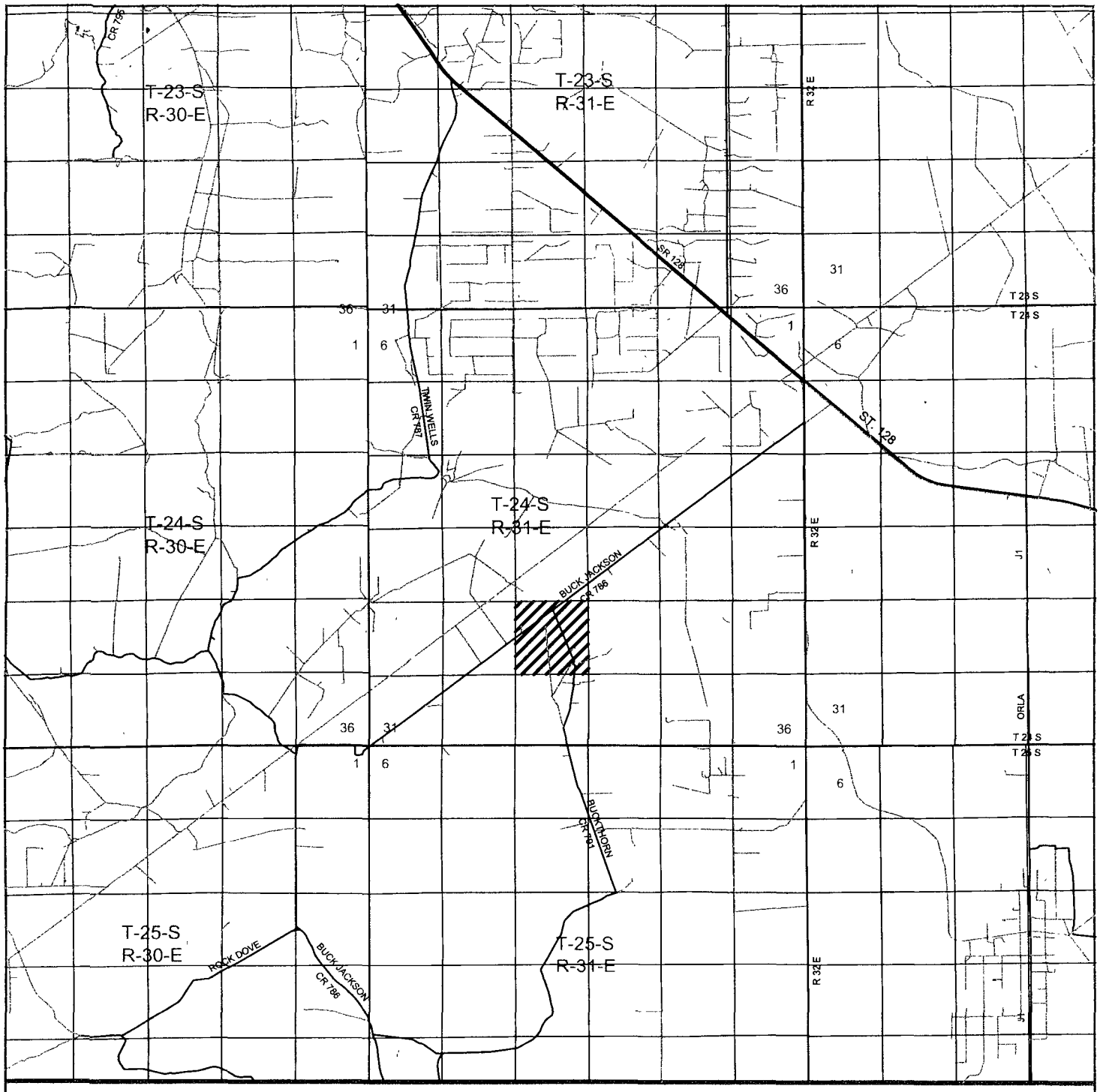
basin surveys
focused on excellence in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number:	JMS 22089
Survey Date:	01-05-2010
Scale:	1" = 2000'
Date.	01-05-2010

N

BOPCO, L.P.



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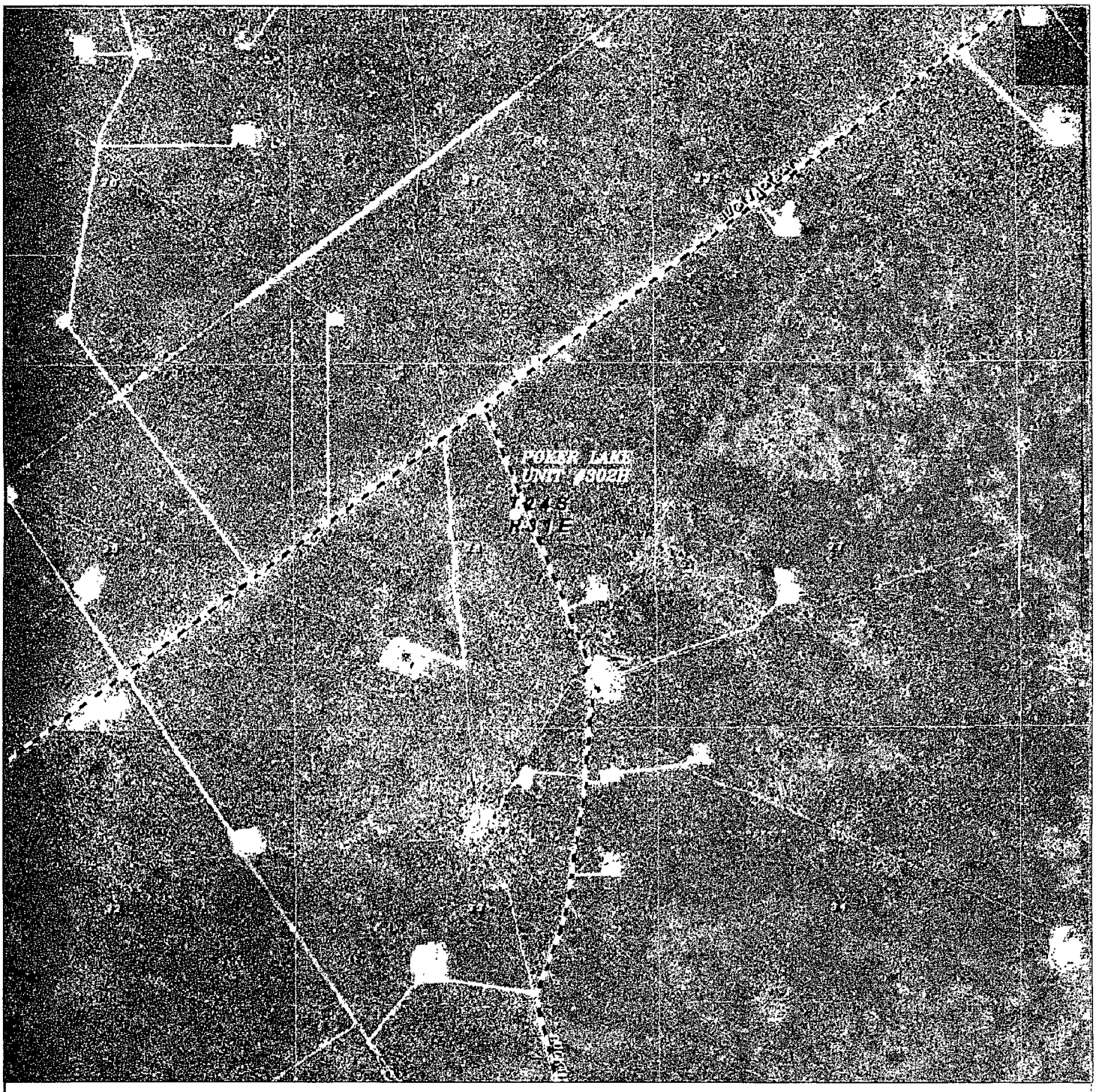
basinsurveys.com

W.O. Number:	JMS 22089
Survey Date.	01-05-2010
Scale:	1" = 2 Miles
Date.	01-05-2010

N

BOPCO, L.P.



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basinsurveys.com

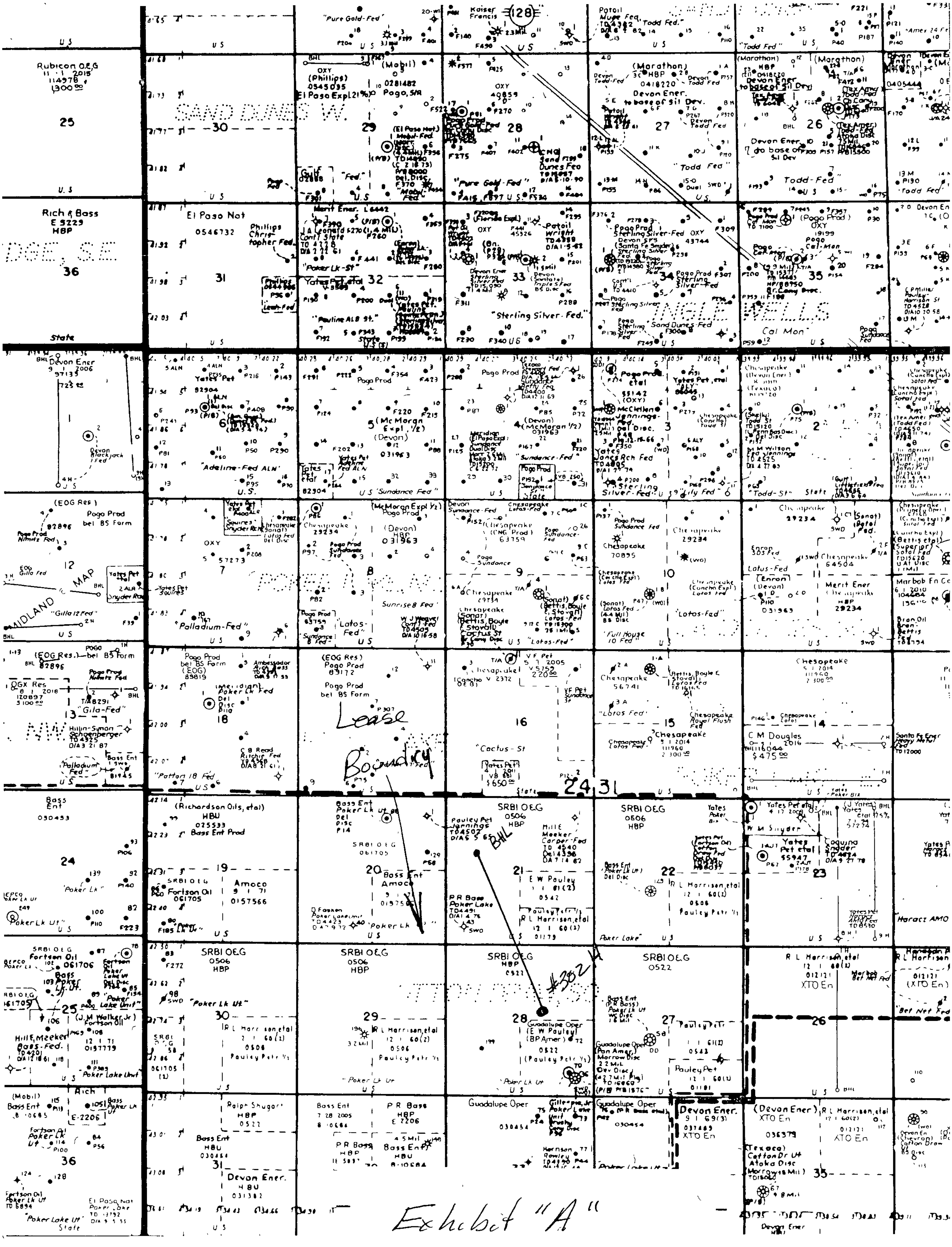
W.O. Number: JMS 22089

Scale: 1" = 2000'

YELLOW TINT - USA LAND
BLUE TINT - STATE LAND
NATURAL COLOR - FEE LAND

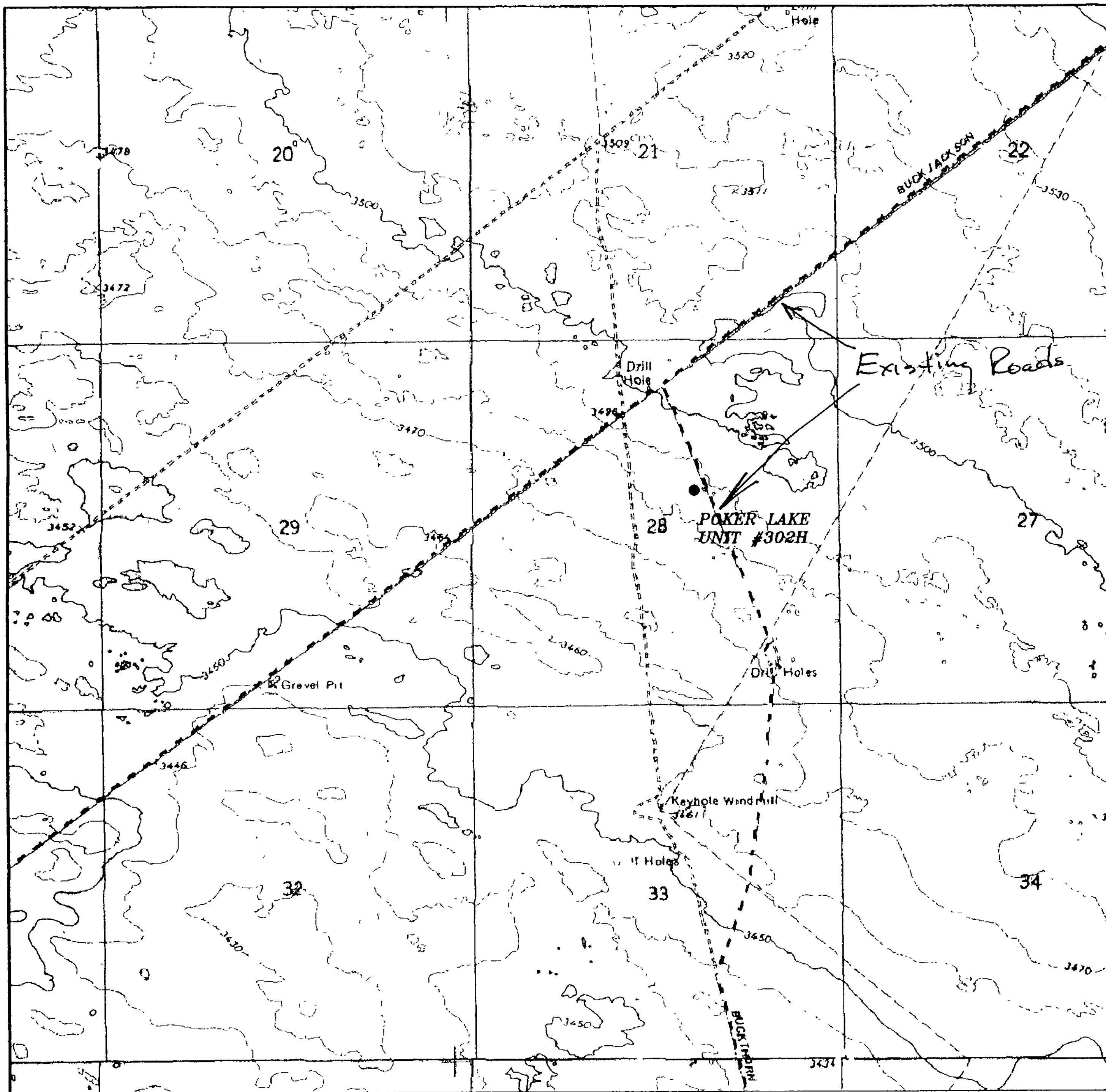
N

BOPCO, L.P.

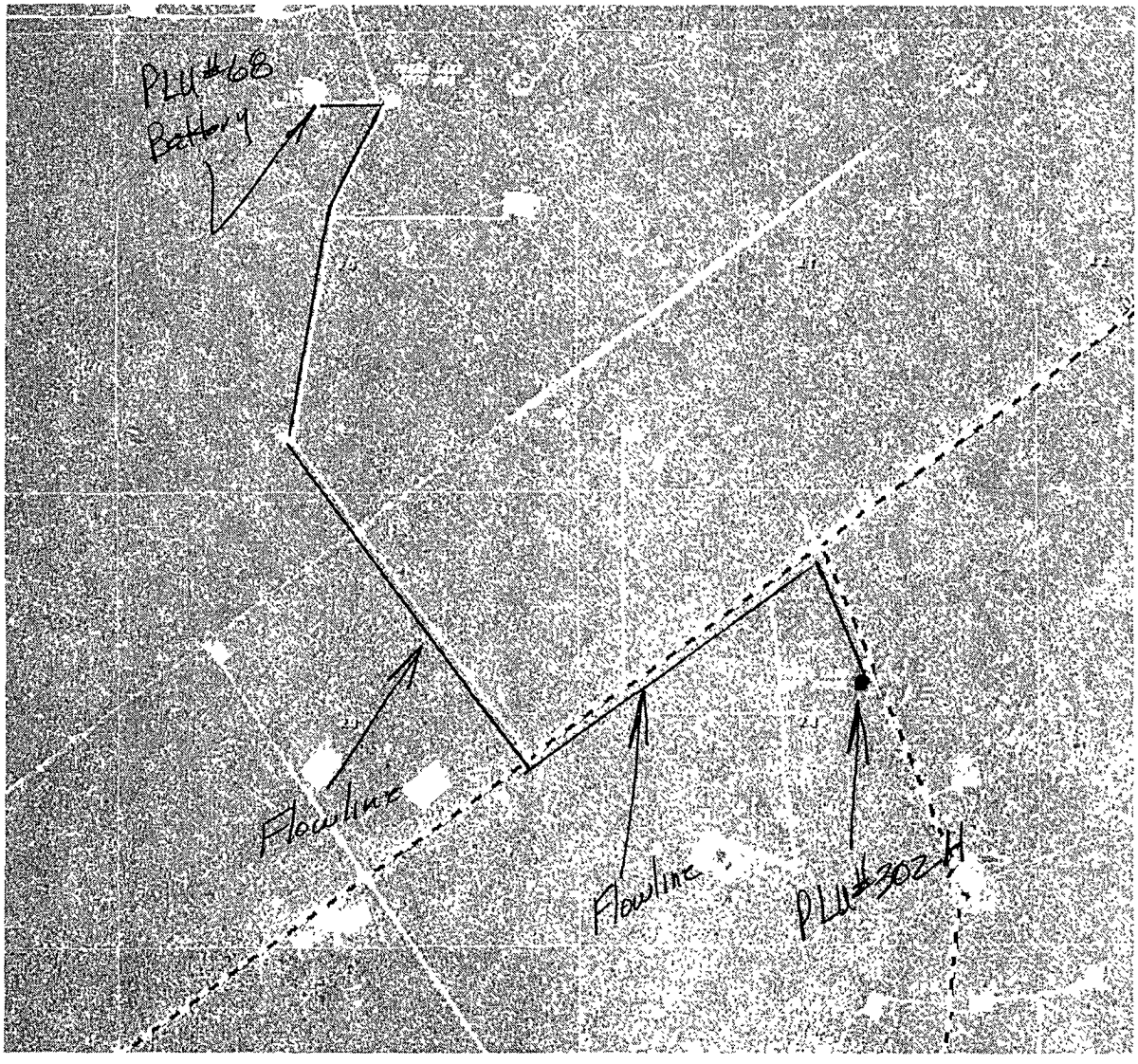


Rubicon O.E.G
Rich & Bass
E 5229
HBP
El Paso Nat
0546732
OXY
(Phillips)
0545035
El Paso Expl.(21%)
(Mobil)
0281482
Pogo, S/R
"Pure Gold-Fed"
(Marathon)
HBP
0418220
Devon Ener.
to base of Sil. Dev.
"Todd Fed"
"Todd-Fed"
"Sterling Silver-Fed."
"Sand Dunes-Fed"
Cal Mon
"Pauline ALB St."
"Poker Lk-St"
Devon Ener
Yates Pet
Pogo Prod
"Adeline-Fed ALN"
(McMoran Expl 1/2)
(Devon)
031963
"Sundance-Fed"
Chesapeake
29234
"Lotos-Fed"
"Palladium-Fed"
"Gila 12 Fed"
MIDLAND MAP
(EOG Res)
Pogo Prod
bel BS Form
"Gila-Fed"
Lease
Boundary
"Cactus-St"
"Patton 18 Fed"
C M Douglas
$475.00
$650.00
24 31
(Richardson Oils, etal)
HBU
025533
Bass Ent Prod
SRBI O.E.G
0506
HBP
Amoco
0157566
Fortson Oil
061705
"Poker Lk Ut"
BHL
#302H
Guadalupe Oper
(E W Pauley)
(BP Amer)
0522
R L Harrison, etal
Pauley Pet
XTO En
Devon Ener.
Bass Ent
HBU
Ralph Shugart
P R Bass
E 2206
"Poker Lake Unit"

Exhibit "A"


Existing Roads
POKER LAKE
UNIT #302H
20
21
22
27
28
29
32
33
34
Drill Hole
Drill Holes
Gravel Pit
Keyhole Windmill
BUCK JACKSON
BUCKTHORN
Hole
3520
3500
3470
3460
3450
3446
3650
3530
3630

\- Exhibit "B" -



- Exhibit "C" -

Surface casing is to be set into the Rustler below all fresh water sands.

7" casing will be set at approximately 8082' (thru curve) and cemented in two stages with DV Tool set at approximately 5000'. Cement will be circulated to surface.

Production liner will be 4-1/2" run, with Baker hydraulic packers for zone isolation. Top of 4-1/2" liner will be approximately 200' above KOP (7370').

Drilling procedure, BOP diagram, and anticipated tops are attached.

This well is located outside the R111 Potash area and outside Secretary's Potash area.

The surface and bottom hole locations are both orthodox.

BOPCO, L.P., at P. O. Box 2760, Midland, TX, 79702 is a subsidiary of BOPCO, L.P., 201 Mail Street, Ft. Worth, TX, 76102. Bond No. COB000050 (Nationwide).

EIGHT POINT DRILLING PROGRAM
BOPCO, L.P.

NAME OF WELL: Poker Lake Unit #302H
LEGAL DESCRIPTION - SURFACE: 2200' FNL, 2030' FEL, Section 28, T24S, R31E, Eddy County, NM.
BHL: 2118' FNL, 969' FWL, Section 21, T24S, R31E, Eddy County, New Mexico.

POINT 1: ESTIMATED FORMATION TOPS
(See No. 2 Below)

POINT 2: WATER, OIL, GAS AND/OR MINERAL BEARING FORMATIONS

Anticipated Formation Tops: KB 3503' (estimated)
GL 3484'

FORMATION	ESTIMATED TOP FROM KB TVD	MD	ESTIMATED SUB-SEA TOP	BEARING
T/Rustler	586'	586'	+2,921'	Barren
B/Rustler	957'	957'	+2,550'	Barren
T/Salt	982'	982'	+2,525'	Barren
B/Salt	4,127'	4,127'	-620'	Barren
T/Delaware Mtn Grp	4,347'	4,347'	-840'	Barren
T/Bell Canyon	4,377'	4,377'	-870'	Oil/Gas
T/Lower Brushy Canyon	7,918'	7,918'	-4,411'	Oil/Gas
T/"W" Sand	8,012'	8,012'	-4,505'	Oil/Gas
T/"Y" Sand	8,086'	8,086'	-4,579'	Oil/Gas
T/Bone Spring Lm	8,208'	8,208'	-4,701'	Oil/Gas
T/Avalon	8,296'	8,296'	-4,789'	Oil/Gas
B/Avalon	8,308'	8,308'	-4,801'	Oil/Gas
Pilot Hole	8,407'	8,407'	-4,900'	Oil/Gas
KOP (Kick Off Point)	7,552'	7,552'	-4,067'	NA
EOC "W" Target	8,029'	8,301'	-4,526'	Oil/Gas
TD (end of lateral)	8,044'	~~14,000~~ 13,654	-4,541'	Oil/Gas

POINT 3: CASING PROGRAM

TYPE	INTERVALS (MD)	Hole Size	PURPOSE	CONDITION
20"	0'- 60'	24"	Conductor	Contractor Discretion
13-3/8", 48#, H40, 8rd, ST&C	0' - 972'	17-1/2"	Surface	New
9-5/8", 40#, N80, 8rd, LT&C	0' - 1,000'	12-1/4"	Intermediate	New
9-5/8", 40#, J55, 8rd, LT&C	1,000' - 4,367'	12-1/4"	Intermediate	New
7", 26#, N-80, 8rd, LT&C	0' - 8,351'	8-3/4"	Production	New
4-1/2", 11.6#, HCP110, Ultra FJT	7,370' - 8,351'	6-1/8"	Production	New
4-1/2", 11.6#, HCP110, 8rd, LTC	8,351' ~~14,000~~ 13,654	6-1/8"	Production	New

CASING DESIGN SAFETY FACTORS:

TYPE	TENSION	COLLAPSE	BURST
13-3/8", 48#, H40, 8rd, ST&C	8 05	1.63	1.82
9-5/8", 40#, N80, 8rd, LT&C	4.98	1.26	1.43
9-5/8", 40#, J55, 8rd, LT&C	3.51	1.26	1.08
7", 26#, N80, 8rd, LT&C	2.78	1.38	1.03
4-1/2", 11.6#, HCP110, Ultra FJT	2.15	1.80	2.14
4-1/2", 11.6#, HCP110, 8rd, LTC	2.15	1.80	2.14

DESIGN CRITERIA AND CASING LOADING ASSUMPTIONS:

SURFACE CASING

Tension — A 1.6 design factor utilizing the effects of buoyancy (9.2 ppg).

Collapse — A 1.0 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.48 psi/ft). The effects of axial load on collapse will be considered.

Burst — A 1.3 design factor with a surface pressure equal to the fracture gradient at setting depth less a gas gradient to the surface. Internal burst force at the shoe will be fracture pressure a that depth. Backup pressure will be formation pore pressure. In all cases a conservative fracture pressure will be used such that it represents the upper limit of potential fracture resistance up to a 1.0 psi/ft gradient. The effects of tension on burst will not be utilized.

PROTECTIVE CASING

Tension — A 1.6 design factor utilizing the effects of buoyancy (10 ppg).

Collapse — A 1.0 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.

In the case of development drilling, collapse design should be analyzed using internal evacuation equal to 1/3 the proposed total depth of the well. This criterion will be used when there is absolutely no potential of the protective string being used as a production casing string.

Burst — A 1.0 surface design factor and a 1.3 downhole design factor with a surface pressure equivalent to the fracture gradient at setting depth less a gas gradient to the surface. Internal burst force at the shoe will be fracture pressure at that depth. Back pressure will be formation pore pressure. In all cases a conservative fracture pressure will be used such that it represents the upper limit of potential fracture resistance up to a 1.0 psi/ft gradient.

PRODUCTION CASING

Tension — A 1.6 design factor utilizing the effects of buoyancy (9.2 ppg).

Collapse — A 1.0 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.48 psi/ft). The effects of axial load on collapse will be considered.

Burst — A 1.25 design factor with anticipated maximum tubing pressure (3529 psig) on top of the maximum anticipated packer fluid gradient. Backup on production strings will be formation pore pressure. The effects of tension on burst will not be utilized.

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

The blowout preventer equipment will be as shown in Diagram #2 and will consist of a double ram type preventer (5000 psi WP) and a bag type (Hydril) annular preventer (5000 psi WP). The same BOPE will be installed on the surface casinghead and on all subsequent casing strings. The BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. when installed on the surface casinghead will be hydro-tested to 200 psig & 2000 psig with independent tester. The BOPE when rigged up on the intermediate casing spool will be tested to 3000 psig by independent tester. In addition to the high pressure test, a low pressure (200 psig) test will be required.

These tests will be performed:

a) Upon installation
b) After any component changes
c) Fifteen days after a previous test
d) As required by well conditions

A function test to insure that the preventers are operating correctly will be performed on each trip.

POINT 5: MUD PROGRAM

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0' - 972'	FW Spud Mud	8.5 – 9.2	38-70	NC	NC	NC	10.0
972' - 4367'	Brine Water	9.8 – 10.2	28-30	NC	NC	NC	9.5 – 10.5
4367' - 8351'	FW/Gel	8.7 – 9.0	28-36	NC	NC	NC	9.5 – 10.0
8351' - 14,000'	FW/Gel	8.7 – 9.0	28-36	NC	NC	NC	9.5 – 10.0

NOTE: May increase vis for logging purposes only.

POINT 6: TECHNICAL STAGES OF OPERATION

A) TESTING

None anticipated.

B) LOGGING See COA

Run #1: PEX (GR-CNL/LDT-AIT) from TD of Pilot hole to 4367' with GR/CNL to surface (BLM required).
Run #2: GR with MWD during drilling of build and horizontal portions of 8-3/4" and 6-1/8" openhole.
Run #3: Drill pipe conveyed GR-NL-Density-Caliper, TD to 250' above the curve.

C) CONVENTIONAL CORING

None anticipated.

D)CEMENT

INTERVAL	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT^3/SX
SURFACE:						
Lead: 0 - 672' (100% excess Circ to surface)	535	672	ExtendaCem-CZ	9.20	13.5	1.75
Tail: 672' - 972' (100% excess)	310	300	HalCem-C + 2% $CaCl_2$	6.39	14.8	1.35
INTERMEDIATE:						
Lead: 0' - 3867' (100% excess Circ to surface)	1310	3867	EconoCem-HLC + 5 pps Gilsonite + 5% Salt	9.32	12.9	1.85
Tail: 3867' - 4367' (100% excess)	250	500	HalCem-C	6.34	14.8	1.33
2nd INTERMEDIATE:						
Stage 1:						
Lead: 5000' - 7570' (50% excess)	200	2570	Halco Tuned Lite + 1.25 pps CFR3 + 1 pps Salt + 0.15 pps WG17	14.47	9.7	3.13
Tail: 7570' - 8351' (50% excess)	150	781	HalcoCem-H + 0.6% Halad R9 + 2% Bentonite	5.95	15.2	1.28
DV Tool @ 5,000'						
Stage 2:						
Lead: 3867' - 4900' (50% excess)	150	1033	EconoCem-HLC + 3 pps Gilsonite + 3% Salt	10.33	12.6	1.95
Tail: 4900' - 5000' (50% excess)	50	100	HalCem-C	6.34	14.8	1 33

E) DIRECTIONAL DRILLING

BOPCO, L.P. plans to drill out the 9-5/8" intermediate casing with an 8-3/4" bit to a TVD of 8407' (Pilot hole). After logging the pilot hole will be plugged back to approximately 7250'. At approximately 7552' a directional hole will be kicked off and drilled at an azimuth of 336.61°, building angle at 12.00°/100' to a max angle of 89.844° at a TVD of 8029' (MD 8351'). At this depth 7" casing will be installed and cement brought to 3867' (500' into 9-5/8" intermediate) in two stages with DV Tool at approximately 5000'. A 6-1/8" openhole will be drilled thru lateral to MD of 14,000' (TVD 8044'). 4-1/2" casing will be installed in the lateral using Baker Hydraulic packers to isolate pay intervals in Brushy Canyon Sand.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Delaware section. A BHP of 3526 psi (max) or MWE of 8.4 ppg is expected. Lost circulation may exist in the Delaware Section from 4367'-8072' TVD. No H_2S is anticipated.

POINT 8: OTHER PERTINENT INFORMATION

A) Auxiliary Equipment

Upper and lower kelly cocks. Full opening stab in valve on the rig floor.

B) Anticipated Starting Date

Upon approval

30 days drilling operations

14 days completion operations

Gary E. Gerhard

GEG/mac
January 15, 2010

Planned Wellpath Report

Prelim_2

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**BOPCO, L.P.**	Slot	**No. 302H SHL**
Area	**Eddy County, NM**	Well	**No. 302H**
Field	**Poker Lake Unit**	Wellbore	**No. 302H PWB**
Facility	**Poker Lake Unit No. 302H**	Sidetrack from	**PILOT HOLE at 0.00 MD**

REPORT SETUP INFORMATION			
Projection System	**NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet**	Software System	**WellArchitect® 2.0**
North Reference	**Grid**	User	**Victor Hernandez**
Scale	**0.999943**	Report Generated	**1/14/2010 at 1:54:53 PM**
Convergence at slot	**0.29° East**	Database/Source file	**WA_Midland/No._302H_PWB.xml**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[USft]**	**Northing[USft]**	**Latitude**	**Longitude**
Slot Location	**0.00**	**0.00**	671088.73	433066.10	32°11'21.863"N	103°46'49.039"W
Facility Reference Pt			**671088.73**	**433066.10**	32°11'21.863"N	103°46'49.039"W
Field Reference Pt			**630272.49**	**405347.85**	32°06'49.387"N	103°54'45.266"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Rig on No. 302H SHL (RT) to GL	**19.00ft**
Horizontal Reference Pt	**Surface Location**	Rig on No. 302H SHL (RT) to Mean Sea Level	**3503.00ft**
Vertical Reference Pt	**Rig on No. 302H SHL (RT)**	GL to Mud Line (Facility)	**0.00ft**
MD Reference Pt	**Rig on No. 302H SHL (RT)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**336.61°**

Planned Wellpath Report

Prelim_2

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**BOPCO, L.P.**	Slot	**No. 302H SHL**
Area	**Eddy County, NM**	Well	**No. 302H**
Field	**Poker Lake Unit**	Wellbore	**No. 302H PWB**
Facility	**Poker Lake Unit No. 302H**	Sidetrack from	**PILOT HOLE at 0.00 MD**

WELLPATH DATA (73 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]	Comments
0.00	0.000	336.608	0.00	0.00	0.00	0.00	671088.73	433066.10	0.00	Tie On
450.00†	0.000	336.608	450.00	0.00	0.00	0.00	671088.73	433066.10	0.00	T/Rustler
885.00†	0.000	336.608	885.00	0.00	0.00	0.00	671088.73	433066.10	0.00	B/Rustler
910.00†	0.000	336.608	910.00	0.00	0.00	0.00	671088.73	433066.10	0.00	T/Salt
4070.00†	0.000	336.608	4070.00	0.00	0.00	0.00	671088.73	433066.10	0.00	B/Salt
4290.00†	0.000	336.608	4290.00	0.00	0.00	0.00	671088.73	433066.10	0.00	T/Delaware Mtn. Grp
4325.00†	0.000	336.608	4325.00	0.00	0.00	0.00	671088.73	433066.10	0.00	T/Bell Canyon
7552.00	0.000	336.608	7552.00	0.00	0.00	0.00	671088.73	433066.10	0.00	EST KOP
7652.00†	12.000	336.608	7651.27	10.43	9.58	-4.14	671084.59	433075.68	12.00	
7752.00†	24.000	336.608	7746.20	41.28	37.89	-16.39	671072.34	433103.98	12.00	
7852.00†	36.000	336.608	7832.65	91.19	83.69	-36.20	671052.53	433149.79	12.00	
7952.00†	48.000	336.608	7906.83	157.98	144.99	-62.72	671026.01	433211.09	12.00	
7984.93†	51 952	336.608	7928.00	183.19	168.13	-72.73	671016.00	433234.22	12.00	T/Lower Brushy Canyon
8052.00†	60.000	336.608	7965.50	238.73	219.11	-94.78	670993.95	433285.20	12.00	
8152.00†	72.000	336.608	8006.10	329.92	302.80	-130.99	670957.75	433368.89	12.00	
8206.77†	78.573	336.608	8020.00	382.87	351.40	-152.01	670936.73	433417.48	12.00	T/W Sand
8252.00†	84.000	336.608	8026.85	427.56	392.41	-169 75	670918.99	433458.49	12.00	
8300.70	89.844	336.608	8029.46	476.17	437.03	-189.05	670899.69	433503.11	12.00	END OF CURVE
8352.00†	89.844	336.608	8029.60	527.46	484.11	-209.42	670879.33	433550.18	0.00	
8452.00†	89.844	336.608	8029.87	627.46	575.89	-249.12	670839.63	433641.96	0.00	
8552.00†	89.844	336.608	8030.15	727.46	667.67	-288.82	670799.93	433733.73	0.00	
8652.00†	89.844	336.608	8030.42	827.46	759.45	-328.52	670760.23	433825.51	0.00	
8752.00†	89 844	336.608	8030.69	927.46	851.23	-368.22	670720.53	433917.28	0.00	
8852.00†	89.844	336.608	8030.96	1027.46	943.01	-407.93	670680.83	434009.06	0.00	
8952.00†	89.844	336.608	8031.23	1127.46	1034.79	-447.63	670641.13	434100.83	0.00	
9052.00†	89.844	336.608	8031.50	1227.46	1126.58	-487.33	670601.43	434192.61	0.00	
9152.00†	89.844	336.608	8031.77	1327.46	1218.36	-527.03	670561.73	434284.38	0.00	
9252.00†	89.844	336.608	8032.05	1427.46	1310.14	-566.74	670522.03	434376.16	0.00	
9352.00†	89.844	336.608	8032.32	1527.46	1401.92	-606.44	670482.33	434467.93	0.00	
9452.00†	89 844	336.608	8032 59	1627.46	1493.70	-646 14	670442.63	434559.71	0.00	

Planned Wellpath Report

Prelim_2

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**BOPCO, L.P.**	Slot	**No. 302H SHL**
Area	**Eddy County, NM**	Well	**No. 302H**
Field	**Poker Lake Unit**	Wellbore	**No. 302H PWB**
Facility	**Poker Lake Unit No. 302H**	Sidetrack from	**PILOT HOLE at 0.00 MD**

WELLPATH DATA (73 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]	Comments
9552.00†	89.844	336.608	8032.86	1727.46	1585.48	-685.84	670402.93	434651.48	0.00	
9652.00†	89.844	336.608	8033.13	1827.46	1677.26	-725.54	670363.23	434743.26	0.00	
9752.00†	89.844	336.608	8033.40	1927.46	1769.04	-765.25	670323.53	434835.03	0.00	
9852.00†	89.844	336.608	8033.68	2027.46	1860.82	-804.95	670283.83	434926.81	0.00	
9952.00†	89.844	336.608	8033.95	2127.46	1952.60	-844.65	670244.13	435018.58	0.00	
10052.00†	89.844	336.608	8034.22	2227.46	2044.38	-884.35	670204.43	435110.36	0.00	
10152.00†	89.844	336.608	8034.49	2327.46	2136.16	-924.06	670164.73	435202.13	0.00	
10252.00†	89.844	336.608	8034.76	2427.46	2227.94	-963.76	670125.03	435293.91	0.00	
10352.00†	89.844	336.608	8035.03	2527.46	2319.72	-1003.46	670085.33	435385.68	0.00	
10452.00†	89.844	336.608	8035.31	2627.46	2411.50	-1043.16	670045.63	435477.46	0.00	
10552.00†	89.844	336.608	8035.58	2727.46	2503.28	-1082.86	670005.93	435569.23	0.00	
10652.00†	89.844	336.608	8035.85	2827.46	2595.06	-1122.57	669966.23	435661.01	0.00	
10752.00†	89.844	336.608	8036.12	2927.46	2686.84	-1162.27	669926.53	435752.78	0.00	
10852.00†	89.844	336.608	8036.39	3027.46	2778.62	-1201.97	669886.83	435844.56	0.00	
10952.00†	89.844	336.608	8036.66	3127.46	2870.40	-1241.67	669847.13	435936.33	0.00	
11052.00†	89.844	336.608	8036.93	3227.45	2962.19	-1281.37	669807.43	436028.11	0.00	
11152.00†	89.844	336.608	8037.21	3327.45	3053.97	-1321.08	669767.73	436119.88	0.00	
11252.00†	89.844	336.608	8037.48	3427.45	3145.75	-1360.78	669728.03	436211 66	0.00	
11352.00†	89.844	336.608	8037.75	3527.45	3237.53	-1400.48	669688.33	436303.43	0.00	
11452.00†	89.844	336.608	8038.02	3627.45	3329.31	-1440.18	669648.63	436395.21	0.00	
11552.00†	89.844	336.608	8038.29	3727.45	3421.09	-1479.89	669608.93	436486.98	0.00	
11652.00†	89.844	336 608	8038.56	3827.45	3512.87	-1519.59	669569.23	436578.76	0.00	
11752.00†	89.844	336.608	8038.84	3927.45	3604.65	-1559 29	669529.53	436670.53	0.00	
11852.00†	89.844	336.608	8039.11	4027.45	3696.43	-1598.99	669489.83	436762.31	0.00	
11952.00†	89.844	336.608	8039.38	4127.45	3788.21	-1638.69	669450.13	436854.09	0.00	
12052.00†	89.844	336.608	8039.65	4227.45	3879.99	-1678.40	669410.43	436945.86	0.00	
12152.00†	89.844	336.608	8039.92	4327.45	3971.77	-1718.10	669370.73	437037.64	0.00	
12252.00†	89.844	336.608	8040.19	4427.45	4063.55	-1757.80	669331.03	437129.41	0.00	
12352.00†	89.844	336.608	8040.46	4527.45	4155.33	-1797.50	669291.33	437221.19	0.00	
12452.00†	89.844	336.608	8040.74	4627.45	4247.11	-1837.21	669251.63	437312.96	0.00	

Planned Wellpath Report

Prelim_2

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**BOPCO, L.P.**	Slot	**No. 302H SHL**
Area	**Eddy County, NM**	Well	**No. 302H**
Field	**Poker Lake Unit**	Wellbore	**No. 302H PWB**
Facility	**Poker Lake Unit No. 302H**	Sidetrack from	**PILOT HOLE at 0.00 MD**

WELLPATH DATA (73 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]	Comments
12552.00†	89.844	336.608	8041.01	4727.45	4338.89	-1876.91	669211.93	437404.74	0.00	
12652.00†	89.844	336.608	8041.28	4827.45	4430.67	-1916.61	669172.23	437496.51	0.00	
12752.00†	89.844	336.608	8041.55	4927.45	4522.45	-1956.31	669132.53	437588.29	0.00	
12852.00†	89.844	336.608	8041.82	5027.45	4614.23	-1996.01	669092.83	437680.06	0.00	
12952.00†	89.844	336.608	8042.09	5127.45	4706.02	-2035.72	669053.13	437771.84	0.00	
13052.00†	89.844	336.608	8042.37	5227.45	4797.80	-2075.42	669013.43	437863.61	0.00	
13152.00†	89.844	336.608	8042.64	5327.45	4889.58	-2115.12	668973.73	437955.39	0.00	
13252.00†	89.844	336.608	8042.91	5427.45	4981.36	-2154.82	668934.04	438047.16	0.00	
13352.00†	89.844	336.608	8043.18	5527.45	5073.14	-2194.53	668894.34	438138.94	0.00	
13452.00†	89.844	336.608	8043.45	5627.45	5164.92	-2234.23	668854.64	438230.71	0.00	
13552.00†	89.844	336.608	8043.72	5727.45	5256.70	-2273.93	668814.94	438322.49	0.00	
13652.00†	89.844	336.608	8044.00	5827.45	5348.48	-2313.63	668775.24	438414.26	0.00	
13653.79	89.844	336.608	8044.00	5829.23	5350.12	-2314.34	668774.53	438415.90	0.00	No. 302H PBHL

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 302H PBHL	13653.79	8044.00	5350.12	-2314.34	**668774.53**	**438415.90**	32° 12' 14.922" N	103° 47' 18.652" W	point

SURVEY PROGRAM Ref Wellbore: No. 302H PWB Ref Wellpath: Prelim_2

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
19.00	13653.79	NaviTrak (Standard)		No. 302H PWB

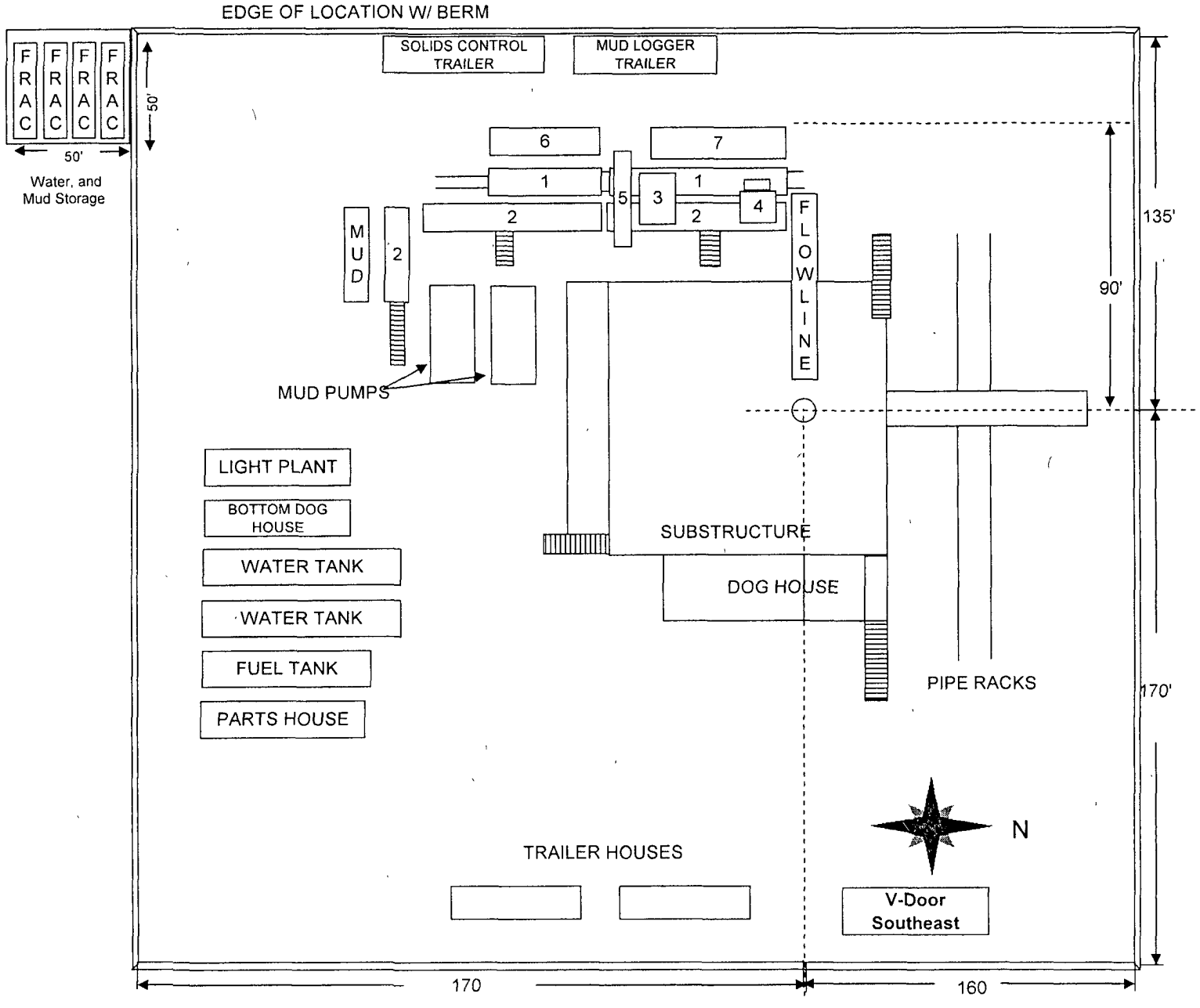
Exhibit "D"

BOPCO, L.P.
Poker Lake Unit #302H
Sec 28, T24S-R31E
Eddy County, NM

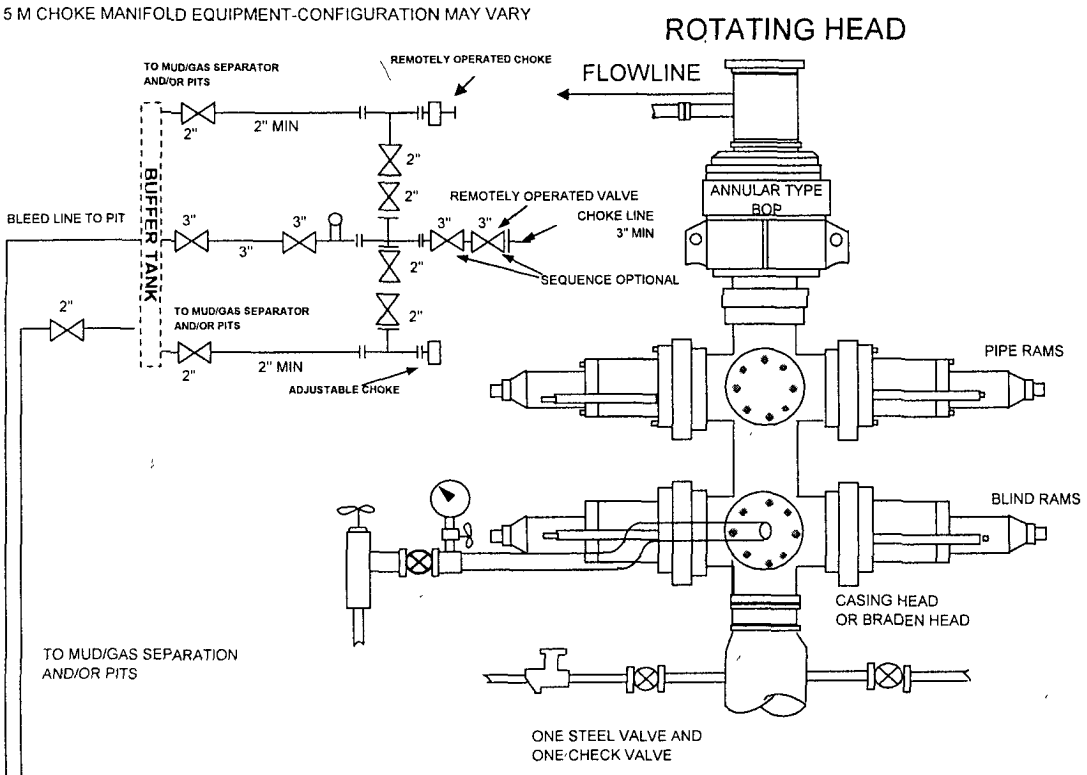
RIG LAYOUT SCHEMATIC
INCLUSIVE OF CLOSED-LOOP DESIGN PLAN

Solids Control Equipment Legend

1) Roll Off Bin
2) Steel Tank
3) Mud Cleaner
4) Shaker
5) Centrifuge
6) Dewatering Unit
7) Catch Tank



BOPCO, L. P.
5-M WP BOPE WITH 5-M WP ANNULAR



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

A One double gate Blowout preventer with lower pipe rams and upper blind rams, all hydraulically controlled

B. Opening on preventers between rams to be flanged, studded or clamped and at least two inches in diameter.

C All connections from operating manifold to preventers to be all steel hose or tube a minimum of one inch in diameter.

D. The available closing pressure shall be at least 15% in excess of that required with suffficient volume to operate (close, open, and re-close) the preventers.

E All connections to and from preventers to have a pressure rating equivalent to that of the BOPs.

F. Manual controls to be installed before drilling cement plug.

G. Valve to control flow through drill pipe to be located on rig floor.

H. Chokes must be adjustable. Choke spool may be used between rams.

DIAGRAM 2

TO STEEL MUD TANKS

BLEED LINE TO STEEL PIT (NOT CONNECTED TO BUFFER TANK

BOPCO, L.P.

Location Eddy County, NM | Slot No. 302H SHL
Field Poker Lake Unit | Well No 302H
Facility Poker Lake Unit No 302H | Wellbore No 302H PWB

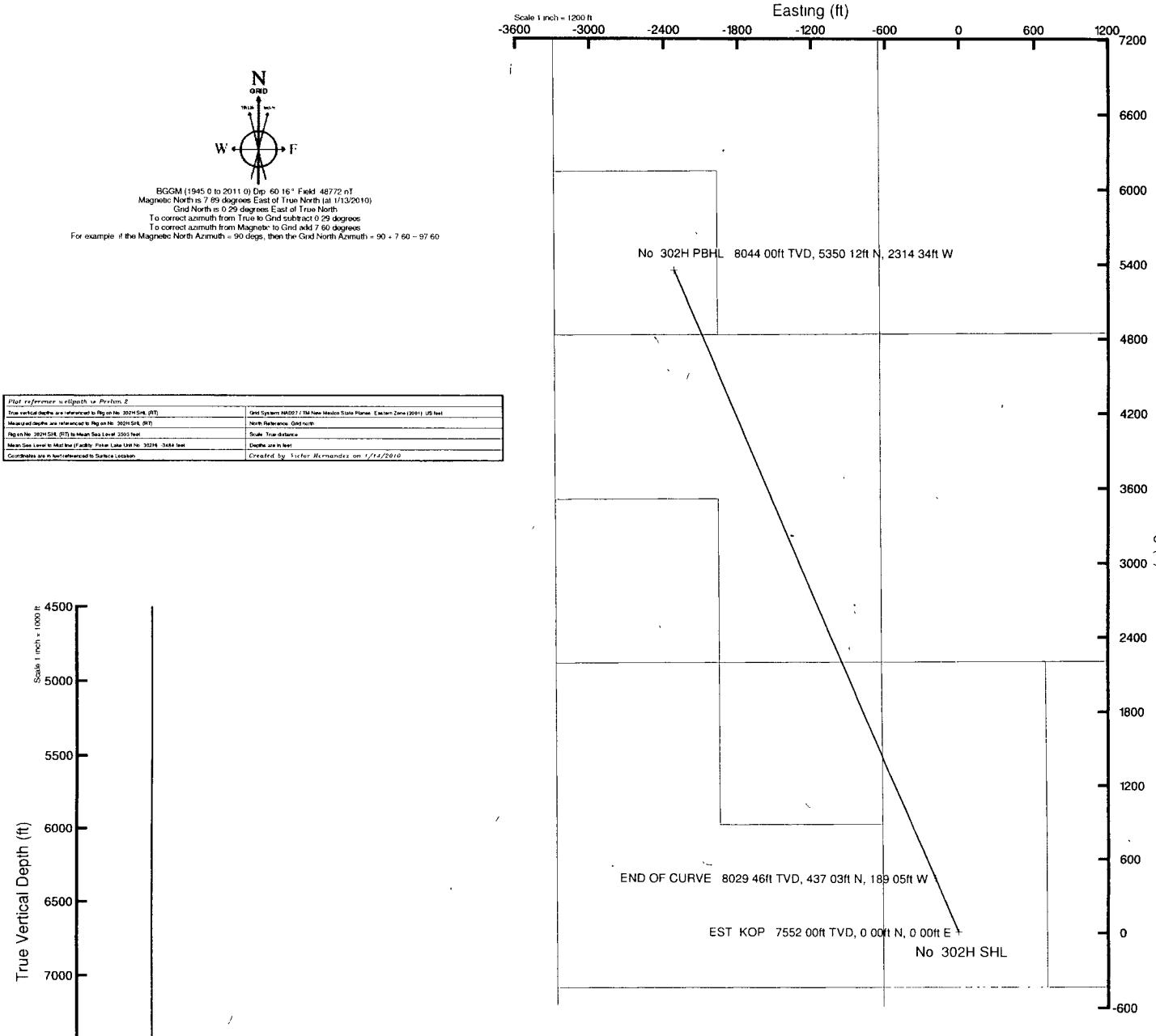
BAKER HUGHES INTEQ

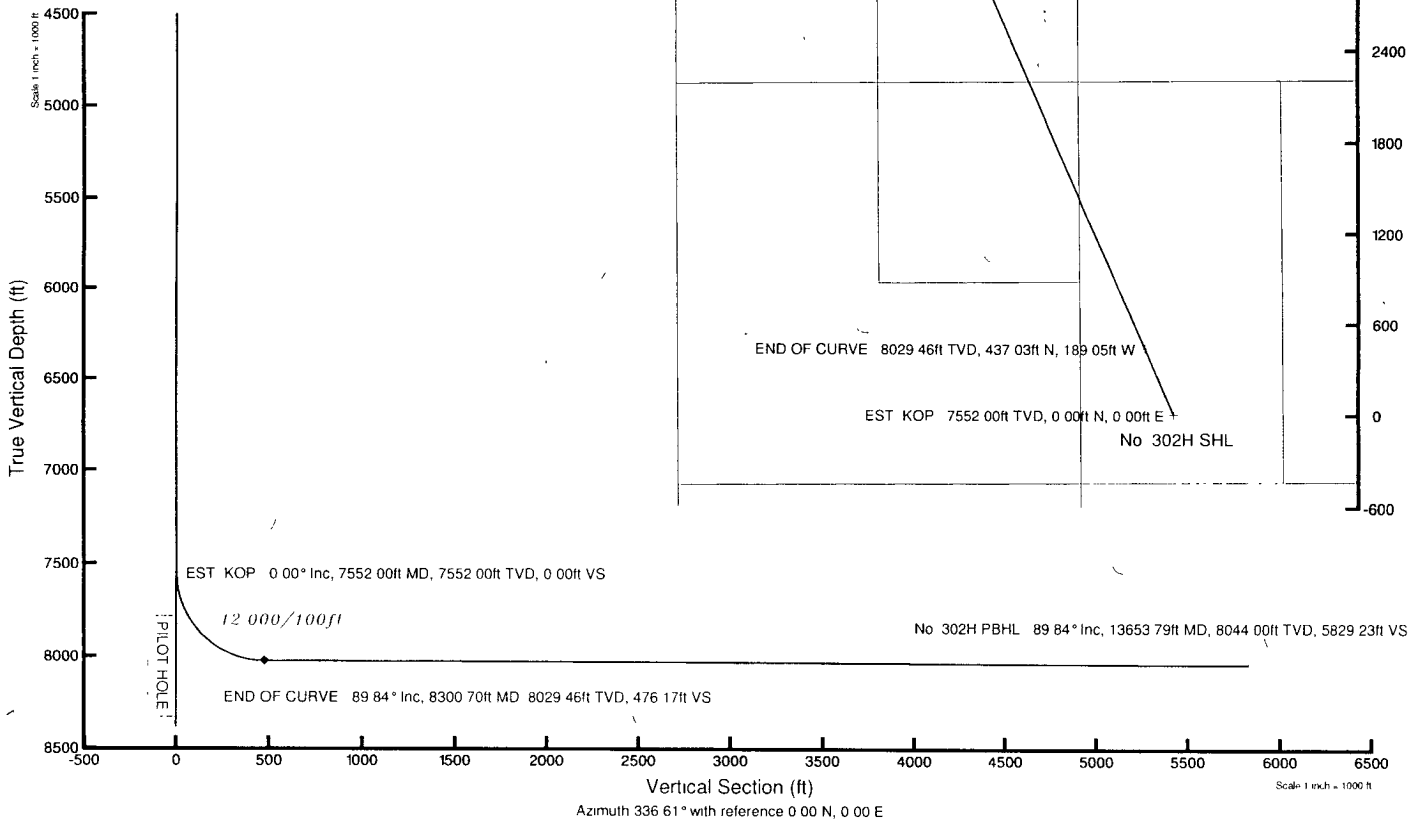
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0 00	0 000	336 608	0 00	0 00	0 00	0 00	0 00
EST KOP	7552 00	0 000	336 608	7552 00	0 00	0 00	0 00	0 00
END OF CURVE	8300 70	89 844	336 608	8029 46	437.03	-189 05	12 00	476.17
No 302H PBHL	13653 79	89 844	336 608	8044 00	5350 12	-2314 34	0 00	5829 23

BGGM (1945 0 to 2011 0) Dip 60 16° Field 48772 nT
Magnetic North is 7 89 degrees East of True North (at 1/13/2010)
Grid North is 0 29 degrees East of True North
To correct azimuth from True to Grid subtract 0 29 degrees
To correct azimuth from Magnetic to Grid add 7 60 degrees
For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7 60 = 97 60

Plot reference wellpath is Prelim 2	
True vertical depths are referenced to Rig on No 302H SHL (RT)	Grid System: NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No 302H SHL (RT)	North Reference: Grid north
Rig on No 302H SHL (RT) to Mean Sea Level 3393 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Poker Lake Unit No 302H) 3484 feet	Depths are in feet
Coordinates are in feet referenced to Surface Location	Created by Victor Hernandez on 1/14/2010





Azimuth 336 61° with reference 0 00 N, 0 00 E

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: Poker Lake Unit #302H
LEGAL DESCRIPTION - SURFACE: 2200' FNL, 2030' FEL, Section 28, T24S, R31E, Eddy County, NM.
BHL: 2118' FNL, 969' FWL, Section 21, T24S, R31E, Eddy County, New Mexico.

POINT 1: EXISTING ROADS

A) Proposed Well Site Location

See Exhibit "A".

B) Existing Roads

Go west of Jal, NM on Hwy 128 approximately 40 miles to Buck Jackson Road. Go southwest on Buck Jackson Road to junction of Buck Jackson Road and Buck Horn Road. Go southerly on Buck Horn Road for 0.3 miles to proposed location.

C) Existing Road Maintenance or Improve Plan

See Exhibit "B"

POINT 2: NEW PLANNED ACCESS ROUTE

A) Route Location

No new road is required. See Basin Plats.

B) Width

12' Wide.

C) Maximum Grade

Not Applicable.

D) Turnouts

As required by BLM stipulations.

E) Culverts, Cattle Guards, and Surfacing Equipment

None.

POINT 3: LOCATION OF EXISTING WELLS

Exhibit "A" indicates existing wells within the surrounding area.

POINT 4: , LOCATION OF EXISTING OR PROPOSED FACILITIES

A) Existing facilities are located within 1-1/2 miles which are owned and controlled by lessee/operator:

Closest Oil/Gas production facilities are located at the Poker Lake Unit #68 well site. The Poker Lake Unit #302H is located approximately 1-1/2 miles southeast of the Poker Lake Unit #68. (See Exhibit "C")

B) New Facilities in the Event of Production:

Additional production facilities will be added to the Poker Lake Unit #68 battery (Section 20, T24S-R31E, NENW) and will be used via flow lines. A new flow line consisting of 2-7/8" steel pipe will be laid within 50' of the centerline of the access road and existing roads which have previously been arch cleared. (**See Exhibit "C"**) Power line routes will be applied for with a Sundry at a later date. A rental generator will be used at Poker Lake Unit #302H for temporary power.

C) Rehabilitation of Disturbed Areas Unnecessary for Production:

Following the construction of production facilities, those access areas not required for continued production will be graded to provide drainage and minimize erosion. The areas necessary for use will be graded to blend in the surrounding topography – See Point 10.

POINT 5: LOCATION AND TYPE OF WATER SUPPLY

A) Location and Type of Water Supply

Fresh water will be hauled from the City of Carlsbad or piped from the IMC Booster Station water well located 5.2 miles east of Carlsbad. Brine water will be hauled from I & W Brine Water Station 0.75 miles southeast of Carlsbad.

B) Water Transportation System

Water hauled to the location will be over the existing and proposed roads or transported via temporary poly-line from the fresh water source.

POINT 6: SOURCE OF CONSTRUCTION MATERIALS

A) Materials-

On site caliche will be used if available.

B) Land Ownership

Federally Owned

C) Materials Foreign to the Site

Caliche will be hauled from the nearest BLM approved caliche pit.

D) Access Roads

No new access roads are required. See Exhibit "B".

POINT 7: METHODS FOR HANDLING WASTE MATERIAL

A) Cuttings – Closed Loop System

Cuttings will be contained in the steel pits and will be hauled to an approved disposal facility.

B) Drilling Fluids – Closed Loop System

Drilling fluids will be contained in the steel pits, frac tanks, and will be disposed of at licensed disposal facilities.

C) Produced Fluids

Water production will be contained in the steel pits.

Hydrocarbon fluid or other fluids that may be produced during testing will be retained in test tanks.

D) Sewage

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

E) Garbage

Portable containers will be utilized for garbage disposal during the drilling of this well.

F) Cleanup of Well Site

Upon release of the drilling rig, the surface of the drilling pad will be graded to accommodate a completion rig if electric log analysis indicate potential productive zones. Reasonable cleanup will be performed prior to the final restoration of the site.

POINT 8: ANCILLARY FACILITIES

None required.

POINT 9: WELL SITE LAYOUT

A) Rig Orientation and Layout

Exhibit "D" shows the dimensions of the well pad and closed loop system, and the location of major rig components. Only minor leveling of the well site will be required. No significant cuts or fills will be necessary.

B) Locations of closed loop system and access road

See Exhibits "D".

C) Lining of the Pits

No reserve pit. Closed loop system.

POINT 10: PLANS FOR RESTORATION OF THE SURFACE

A) Reserve Pit Cleanup - Not applicable (see Point 9C above).

The pits will be fenced immediately after construction and shall be maintained until they are backfilled. Previous to backfill operations, any hydrocarbon material on the pits' surfaces shall be removed. The fluids and solids contained in the pits shall be backfilled with soil excavated from the site and soil adjacent to the reserve pits. The restored surface of the pits shall be contoured to prevent impoundment of surface water flow. Water-bars will be constructed as needed to prevent excessive erosion. Topsoil, as available, shall be placed over the restored surface in a uniform layer. The area will be seeded according to the Bureau of Land Management stipulations during the appropriate season following restoration.

B) Restoration Plans - Production Developed

In addition, those areas not required for production will be graded to blend with the surrounding topography. Topsoil, as available, will be placed upon those areas and seeded. The portion of the site required for production will be graded to minimize erosion and provide access during inclement conditions. Following depletion and abandonment of the site, restoration procedures will be those that follow under Item C.

C) Restoration Plans - No Production Developed

With no production developed, the entire surface disturbed by construction of the well site will be restored. The site will be contoured to blend with the surrounding topography and provide drainage of surface water. The topsoil, as available, shall be replaced in a uniform layer and seeded according to the Bureau of Land Management's stipulations.

D) Rehabilitation's Timetable

Upon completion of drilling operations, the initial cleanup of the site will be performed as soon as weather and site conditions allow economic execution of the work.

A) Terrain

Relatively flat.

B) Soil

Caliche and sand.

C) Vegetation

Sparse, primarily grasses and mesquite with very little grass.

D) Surface Use

Primarily grazing.

E) Surface Water

There are no ponds, lakes, streams or rivers within several miles of the wellsite.

F) Water Wells

There are no water wells located within one mile of the proposed well site.

G) Residences and Buildings

None in the immediate vicinity.

H) Historical Sites

None observed.

I) Archeological Resources

A payment to the MOA fund will be made. Any location or construction conflicts will be resolved before construction begins.

J) Surface Ownership

The well site is on federal owned land.

K) Well signs will be posted at the drilling site.

L) Open Pits - None used. Closed loop system.

POINT 12: OPERATOR'S FIELD REPRESENTATIVE

(Field personnel responsible for compliance with development plan for surface use).

DRILLING
W.R Dannels
Box 2760
Midland, Texas 79702
(432) 683-2277

PRODUCTION
Dean Cleammer
3104 East Green Street
Carlsbad, New Mexico 88220
(505) 887-7329

Carlos Cruz
Box 2760
Midland, Texas 79702
(432) 683-2277

OPERATOR CERTIFICATION

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by BOPCO, L.P. and it's contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

1/15/10
Date

Gary E. Gerhard (432) 683-2277

BOPCO, L.P.

P. O. Box 2760
Midland, Texas 79702

432-683-2277 FAX-432-687-0329

January 15, 2010

Bureau of Land Management
Carlsbad Field Office
620 East Green Street
Carlsbad, New Mexico 88220-6292

Attn: Mr. Don Peterson – Assistant Field Manager, Minerals

RE: APPLICATION FOR PERMIT TO DRILL – 3162.4
Poker Lake Unit #302H, LEASE NM0506A - NM0522A
2200' FSN, 2030' FEL, SEC 28, T24S, R31E, EDDY COUNTY, NM

Dear Mr. Peterson,

In reference to the above captioned well, I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in the attached eight point drilling plan and multi-use surface plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by BOPCO, L.P. and it's contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

If you have any questions regarding the accuracy of the plan provided herein, please do not hesitate to contact me at (432) 683-2277.

Sincerely,

Gary Gerhard
Drilling Engineer

Form NM 8140-9
(March 2008)

United States Department of the Interior
Bureau of Land Management
New Mexico State Office

Permian Basin Cultural Resource Mitigation Fund

The company shown below has agreed to contribute funding to the Permian Basin Cultural Resource Fund in lieu of being required to conduct a Class III survey for cultural resources associated with their project. This form verifies that the company has elected to have the Bureau of Land Management (BLM) follow the procedures specified within the Memorandum of Agreement (MOA) concerning improved strategies for managing historic properties within the Permian Basin, New Mexico, for the undertaking rather than the Protocol to meet the agency's Section 106 obligations.

Company Name: BOPCO, L.P.

Address: P. O. Box 2760

Midland, Texas 79702

Project description: Drilling and completion of Lower Brushy Canyon horizontal well

Poker Lake Unit #302H

T, 24S, R 31E, Section 28 NMPM, Eddy County, New Mexico

Amount of contribution: $1,339.00

Provisions of the MOA:

A. No new Class III inventories are required of industry within the Project Area for those projects where industry elects to contribute to the mitigation fund.

B. The amount of funds contributed was derived from the rate schedule established within Appendix B of the MOA. The amount of the funding contribution acknowledged on this form reflects those rates.

C. The BLM will utilize the funding to carry out a program of mitigation at high-priority sited whose study is needed to answer key questions identified within the Regional Research Design.

D. Donating to the fund is voluntary. Industry acknowledges that it is aware it has the right to pay for Class III survey rather than contributing to the mitigation fund, and that it must avoid or fund data recovery at those sites already recorded that are eligible for nomination to the National Register or whose eligibility is unknown and that any such payments are independent of the mitigation funds established by this MOA.

E. Previously recorded archeological sites determined eligible for nomination to the National Register or whose eligibility remains undetermined must be avoided or mitigated.

F. If any skeletal remains that might be human or funerary objects are discovered by any activities, the land-use applicant will cease activities in the area of discovery, protect the remains, and notify the BLM within 24 hours. The BLM will determine the appropriate treatment of the remains in consultation with culturally affiliated Indian Tribe(s) and lineal descendents. Applicants will be requited to pay for treatment of the cultural items independent and outside of the mitigation fund.

S J Johnson
Company-Authorized Officer

1-15-10
Date

BLM-Authorized Officer

Date

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BOPCO LP
LEASE NO.:	NM0506A
WELL NAME & NO.:	302H-Poker Lake Unit
SURFACE HOLE FOOTAGE:	2200' FNL & 2030' FEL
BOTTOM HOLE FOOTAGE	2118' FNL & 969' FWL
LOCATION:	Section 28, T. 24 S., R 31 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

Plan of Development

Operator is to submit a Unit Plan of Development (UPOD) annually to the BLM. Guidelines for UPOD are available upon request at the BLM Carlsbad Field Office.

Commercial Well Determination

Well is outside of NMNM – 71016D participating area. A commercial well determination will need to be submitted.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. V-DOOR DIRECTION: Not Stipulated

C. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be used for interim and final reclamation.

D. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

E. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call theCarlsbad Field Office at (575) 234-5972.

F. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

G. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

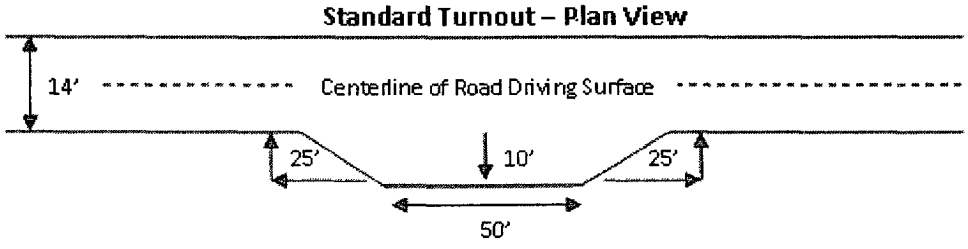
Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

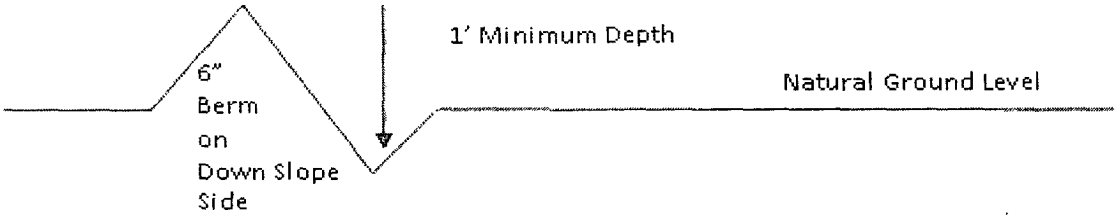
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage
Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

Culvert Installations
Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards
An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

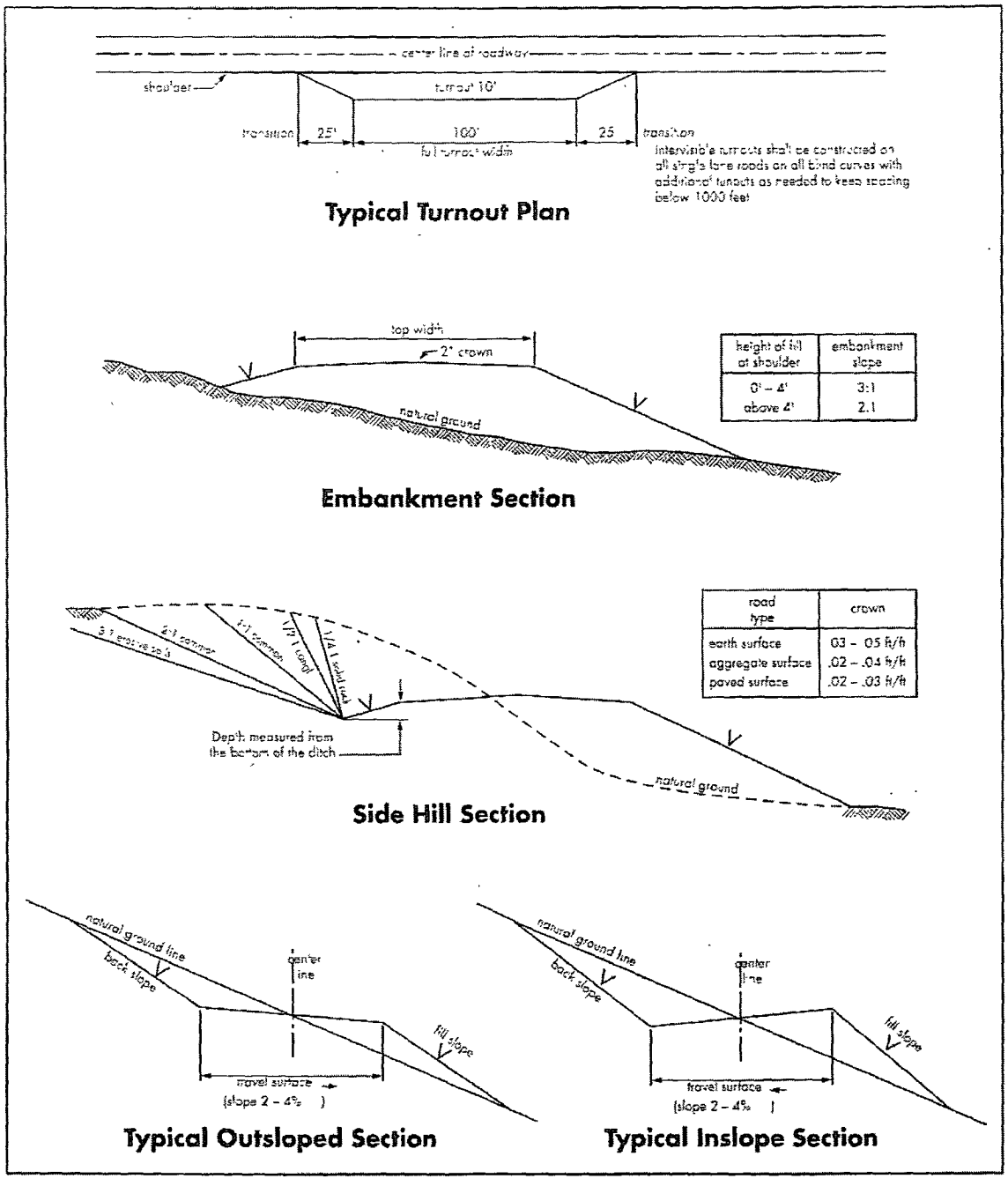
Fence Requirement
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**

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

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the CAL/GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possible lost circulation in the Delaware and Bone Spring formations.

1. The **13-3/8** inch surface casing shall be set at **approximately 972 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. **If the salt is encountered set the casing 25 feet above the top of the salt.**

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

    ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

Pilot hole is required to have a plug at the bottom of the hole. If two plugs are set, the BLM is to be contacted (575-361-2822) prior to tag of bottom plug, which must be a minimum of 180' in length. Operator can set one plug from bottom of pilot hole to kick-off point and save the WOC time for tagging the first plug.

3. The minimum required fill of cement behind the 7 inch production casing is:

   ☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

4. Cement not required on the **4-1/2"** liner. **Packer system being used.**

5. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi. **Operator installing a 5M system but testing as a 2M.**

   a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** inch intermediate casing shoe shall be **3000 (3M)** psi. **Operator installing a 5M system but testing as a 3M.**

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

   a. Casing cut-off and BOP installation will not be initiated until the cement has had 4-6 hours of setup time in a water basin and 12 hours in the potash areas. This time will start after the cement plug is bumped. Testing the BOP/BOPE against a plug can commence after meeting the above conditions plus the BOP installation time.

   b. The tests shall be done by an independent service company utilizing a test plug.

   c. The results of the test shall be reported to the appropriate BLM office.

d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

CRW 021010

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures
The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES - Surface Flowline stipulations are attached. Operator has applied for 1.5 miles of 2 7/8 inch steel pipeline to run from the PLU 302H to the PLU #68 Battery.

C. ELECTRIC LINES – Not applied for in APD.

IX. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared; these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A
**Four-winged Saltbush	5lbs/A

* This can be used around well pads and other areas where caliche cannot be removed.

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed