

SECRETARY'S POTASH

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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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SAL-02447 NMLC 0069705 (BHL)	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name Surface lease: See pg1, 8 pt.	
2. Name of Operator BOPCO, L. P.		7. If Unit or CA Agreement, Name and No. Big Eddy Unit MNM 68294X	
3a. Address P. O. Box 2760 Midland, TX 79702		8. Lease Name and Well No. Big Eddy Unit 265H ⁶⁰ <i>< 30580/5</i>	
3b. Phone No. (include area code) 432-683-2277		9. API Well No. 30-05-41076	
4. Location of Well (Report location clearly and in accordance with any State requirements*) At surface NESW, UL C, 1120' FNL & 1980' FWL, Lat:N32.620981, Lg:W103.858683		10. Field and Pool, or Exploratory Haekberry, Wolfcamp (98002)	
At proposed prod. zone NWNE, UL B, 660' FNL & 1980' FEL, Sec 33, T19S-R31E		11. Sec., T.R.M. or Blk and Survey or Area Sec 34, T19S-R31E, Mer, NMP	
14. Distance in miles and direction from nearest town or post office* 26 miles northwest of Carlsbad		12. County or Parish Eddy	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1120' (lease line) 2296' (unit line)		13. State NM	
16. No. of acres in lease 1920		17. Spacing Unit dedicated to this well 160	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 419'		20. BLM/BIA Bond No. on file COB 000050	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3464' GL		22. Approximate date work will start* 01/15/2013	
		23. Estimated duration 50 days	

WC-015 G-08 S193134C; Wolfcamp

24. Attachments
- The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:
- Well plat certified by a registered surveyor.
 - A Drilling Plan.
 - A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
 - Bond to cover the operations unless covered by an existing bond on file (see item 20 above).
 - Operator certification
 - Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <i>Jeremy Braden</i>	Name (Printed/Typed) Jeremy Braden	Date 11-14-12
Title Engineering Assistant		

Approved by (Signature) <i>Aden L Seidlitz</i>	Name (Printed/Typed)	Date JAN 29 2013
Title STATE DIRECTOR	Office NM STATE 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)

Capitan Controlled Water Basin

Approval Subject to General Requirements & Special Stipulations Attached

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

Form C-102
Revised July 16, 2010

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

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

WELL LOCATION AND ACREAGE DEDICATION PLAT AMENDED REPORT

API Number 30-015-71076	Pool Code 97081 98002	Well Name WC-015G-08 Hackberry, Wolfcamp	Well Number 5193134;
Property Code 305860	Property Name BIG EDDY UNIT	Well Number 265H	
OGRID No. 260737	Operator Name BOPCO, L.P.	Elevation 3464'	

Surface Location

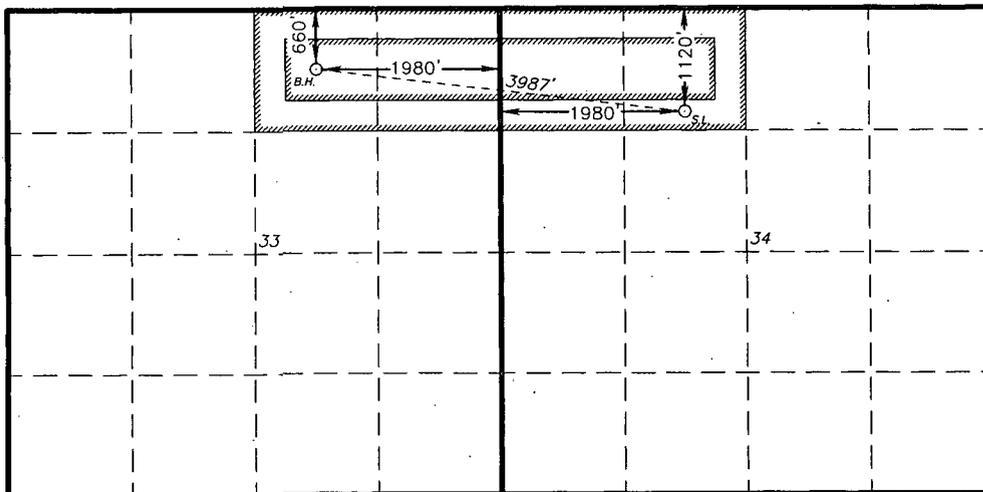
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	34	19 S	31 E		1120	NORTH	1980	WEST	EDDY

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
B	33	19 S	31 E		660	NORTH	1980	EAST	EDDY

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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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°37'20.03"
 Long - W 103°52'17.56"
 NMSPC E 590387.369
 E 642177.414
 (NAD-27)

SURFACE LOCATION WOLF CAMP PT
 Lat - N 32°37'15.53"
 Long - W 103°51'31.26"
 NMSPC E 589950.152
 E 646139.623
 (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.

Jeremy Braden 11-14-12
 Signature Date

Jeremy Braden
 Printed Name

jdbraden@basspet.com
 Email Address

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.

SEP 14 2011
 Date Surveyed

GARY L. JONES
 Signature & Seal of Professional Surveyor 7877

NOV 14 2011
 Date of Survey

Certificate No. Gary L. Jones 7977

BASIN SURVEYS 25322

BOPCO, L.P.

P. O. Box 2760
Midland, Texas 79702

432-683-2277

FAX-432-687-0329

November 14, 2012

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
Big Eddy Unit 265H
1,120' FNL, 1,980' FWL, Sec. 34, T19S, R31E, Eddy County, NM

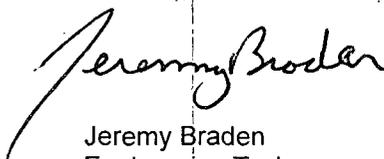
Dear Mr. Peterson,

In reference to the above captioned well, I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in the APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 14 day of November, 20 12.

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,



Jeremy Braden
Engineering Tech

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

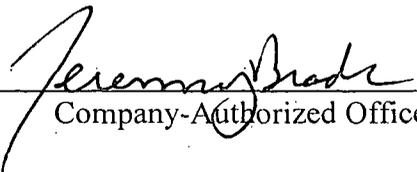
Project description: Big Eddy Unit 265H location, flow line and power line construction.

T, 19S, R 31E, Section 34 NMPM, Eddy County, New Mexico

Amount of contribution: \$ 1,463.00

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 required to pay for treatment of the cultural items independent and outside of the mitigation fund.



Company-Authorized Officer

11-14-12
Date

BLM-Authorized Officer

Date

Surface casing is to be set into the Rustler below all fresh water sands at an approximate depth of 893' and cement circulated to surface.

A Capitan Reef string will be set at an approximate depth of 3,865' and cement circulated to surface.

A full string of 5-1/2, 17 ppf, LTC production casing will be set and cement circulated to surface.

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

This well is located outside the R-111 Potash area and inside the Secretary's Order for Potash area.

The surface location is nonstandard and located inside the Big Eddy Unit.

The BHL is standard and located inside the Big Eddy Unit.

Surface Lease Numbers- Federal Lease: NMNM ~~00~~02447 (1360 acres)

Bottom Hole Lease Numbers – Federal Lease: NMLC ~~00~~069705 (560 acres)

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

**EIGHT POINT DRILLING PROGRAM
BOPCO, L.P.**

NAME OF WELL: Big Eddy Unit 265H

LEGAL DESCRIPTION - SURFACE: 1,120' FNL, 1,980' FWL, Section 34, T19S, R31E, Eddy County, NM.

BHL: 660' FNL, 1,980' FEL, Section 33, T19S, 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 3,493' (estimated)
GL 3,464'

Formation Description	Est from KB (TVD)	Est (MD)	SUB-SEA TOP	BEARING
T/Fresh Water	130'	130'	+ 3,363'	Fresh Water
T/Rustler	833'	833'	+ 2,660'	Barren
T/Salt	903'	903'	+ 2,590'	Barren
B/Salt	2,053'	2,053'	+ 1,440'	Barren
T/Castile	2,053'	2,053'	+ 1,440'	Barren
B/Castile	2,893'	2,893'	+ 600'	Barren
T/Capitan Reef	2,893'	2,893'	+ 600'	Water
T/Delaware Mountain Group	4,418'	4,418'	- 925'	Oil
T/1 st Delaware Sand	4,443'	4,443'	- 950'	Oil
T/Bone Spring Lime	6,983'	6,983'	- 3,490'	Oil
T/Wolfcamp	10,258'	10,258'	- 6,765'	Oil
T/Lower Wolfcamp	10,808'	10,808'	- 7,315'	Oil
T/Strawn	11,183'	11,183'	- 7,690'	Oil
TD Pilot Hole	11,325'	11,325'	- 7,832'	Oil

FORMATION (LATERAL HOLE)	TOP EST FROM KB (TVD)	MD	SUB-SEA TOP	BEARING
Est. KOP	10,494'	10,494'	- 7,001'	Oil
Target #1	11,072'	11,453'	- 7,579'	Oil
PBHL	11,062'	14,780'	- 7,569'	Oil

POINT 3: CASING PROGRAM

TYPE	INTERVAL MD	HOLE SIZE	PURPOSE	INSTALLATION TYPE
20" Conductor	0 – 120'	30"	Conductor	New
16", 84 ppf, J-55, BTC	0' – 893'	18-1/8"	Surface	New
13-3/8", 68 ppf, HCL-80, Ultra Flush Joint	0' – 2,793'	14-3/4"	1 st Intermediate	New
9-5/8", 40 ppf, N-80, LTC	0' – 4,438'	12-1/4"	2 nd Intermediate	New
5-1/2", 17 ppf, P-110, LTC	0' – 14,780'	7-7/8"	Production	New

CASING DESIGN SAFETY FACTORS:

TYPE	TENSION	COLLAPSE	BURST
16", 84 ppf, J-55, BTC	20.95	3.25	1.93
13-3/8", 68 ppf, HCL-80, Ultra Flush Joint	6.63	1.84	3.22
9-5/8", 40 ppf, N-80, LTC	4.83	1.32	2.32
5-1/2", 17 ppf, P-110, LTC	3.87	1.79	2.43

DESIGN CRITERIA AND CASING LOADING ASSUMPTIONS:**SURFACE CASING - (16")**

- Tension A 1.6 design factor utilizing the effects of buoyancy (9.2 ppg).
- Collapse A 1.125 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 1.125 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 at 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.

SURFACE CASING - (13-3/8")

- Tension A 1.6 design factor utilizing the effects of buoyancy (10.2 ppg).
- Collapse A 1.125 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 1.125 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 at 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 - (9-5/8")

- Tension A 1.6 design factor utilizing the effects of buoyancy (9.2 ppg).
- Collapse A 1.125 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 1.125 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. 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.

Production CASING - (5-1/2")

- Tension A 1.6 design factor utilizing the effects of buoyancy (9.0 ppg).
- Collapse A 1.125 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 1.125 design factor with anticipated maximum tubing pressure (5000 psig) on top of the maximum anticipated packer fluid gradient. (0.433 psi/ft) Backup on production strings will be formation pore pressure. (0.433 psi/ft) The effects of tension on burst will not be utilized.

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM A, B, or C)

The BOPE when rigged up on the 16" surface casing head (18-1/8" hole) will consist of 20" hydril and diverter system per Diagram B (2,000 psi WP). The hydril when installed on surface casing will be tested to 1,000 psi.

After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 3M will be installed, used, maintained and tested as per Onshore Order 2. In addition to the high pressure test, a low pressure (250-300 psig) test will be performed.

After running the 9-5/8" intermediate casing, a 13-5/8" or 11" BOP/BOPE system with a minimum rating of 3M will be installed on the 9-5/8" intermediate casing spool (12-1/4" open hole), used, maintained and tested as per Onshore Order 2. In addition to the high pressure test, a low pressure (250-300 psig) test will be performed.

H2S contingency

H2S monitors shall be installed prior to drilling out the surface shoe. If H2S is encountered in quantities greater than 10 PPM, the well will be shut in and H2S equipment will be installed, including a flare line that will be extended pursuant to onshore oil and gas order #6.

These tests will be performed:

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

PRESSURE CONTROL EQUIPMENT CONT...

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

BOPCO, L.P. would like to request a variance to use an armored, 3" minimum, 5000 psi WP flex hose for the choke line in the drilling of the well if the rig is equip with hose. (See specification for hose that might be used, attached with APD exhibits). This is rig equipment and will help quicken nipple up time thus saving money without a safety problem. The hose itself is rated to 5000 psi, and has 5000 psi flanges on each end. This well is to be drilled to 14,780 MD (11,062' TVD) and max surface pressure should be +/- 2743 psi as prescribed in onshore order #2 shown as max BHP minus 0.22 psi/ft. Thus, 3000 psi BOPE is all that is needed for this well. **Please refer to diagram A, B, or C for choke manifold and closed loop system layout. If an armored flex hose is utilized, the company man will have all of the proper certified paper work for that hose available on location.**

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0 - 893'	FW Spud Mud	8.5 - 9.2	38-70	NC	NC	NC	10.0
893' - 2,793'	Brine Water	9.8 - 10.2	28-30	NC	NC	NC	9.5 - 10.5
2,793' - 4,438'	FW Mud	8.5 - 9.2	28-30	NC	NC	NC	9.5 - 10.5
4,438' - 14,780'	FW/Gel/Starch	8.7 - 9.0	28-36	NC	NC	<100	9.5 - 10.0

NOTE: May increase vis for logging purposes only.

POINT 6: TECHNICAL STAGES OF OPERATION

MUD MONITORING SYSTEM

1. BOPCO L.P. plans to drill the proposed well with water and does not expect to mud up. In the event of abnormal pressures that require mudding up, BOPCO L.P. will record slow pump rates on the daily drilling report on a daily basis.
2. Visual mud monitoring equipment will be installed to detect volume changes.
3. Pit volume totalizers are installed on rig before spud.
4. BOPCO L.P. has the drilling mud checked every 24 hrs., and the daily mud check will be posted in the company man's trailer.
5. BOPCO L.P. will be using a 3M system so trip tanks will not be required per Onshore order #2.
6. Gas detections systems will be installed on exploratory wells per Onshore order #2. Please refer to section G under point 6 in the 8pt drilling program for H2S safety information.

Sufficient mud materials will be kept at the well site to maintain mud properties and meet minimum lost circulation and weight increase requirements at all times (sack or bulk barite will not be on location until 500' above the top of the wolfcamp.)

A) TESTING
None anticipated.

B) LOGGING

See COP

Run #1: Pilot Hole - Platform express

Run #2: Lateral Hole - CMI Shuttle/With Gamma for caliper.

Mud Logger: Rigged up at 100'

C) CONVENTIONAL CORING

None anticipated

D) CEMENT

Pilot hole plug back:

INTERVAL	AMT SXS	FT OF FILL	TYPE	GAL/SX	PPG	FT ³ /SX
9,925' - 10,625'	670	700	Class H-50/50 POZ + 0.2 FL-52	5.74	18.0	0.89
10,625' - 11,325'	480	700	Class H + 1.2 CD-32 + 0.1 R3	2.93	14.2	1.26

INTERVAL	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT ³ /SX
<u>SURFACE:</u>						
Lead: 0' - 593'	300	593	Class C + 2% CACL + 4% Bentonite + 0.25 LB/SK Cello Flake + 3 lb/sk LCM-1	8.69	13.50	1.75
Tail: 593' - 893'	360	300	Class C + 2% CACL + 0.25 LB/SK CF + 0.25LB/SK Cello Flake + 3 lb/sk LCM-1	6.35	14.80	1.35
<u>1st INTERMEDIATE:</u>						
Lead: 0' - 2,293'	480	2293	Class C + 0.1% HR-601, 3% salt	9.66	12.90	1.82
Tail: 2,293' - 2,793'	200	500	Class C + 0.2% PF13	6.34	14.80	1.33
<u>2nd INTERMEDIATE:</u>						
Lead: 0' - 3,938'	1180	3938	EconoCEM HLC + 5% CaCl + 5#/sk Gilsonite	9.32	12.90	1.93
ECP 50' above reef set @ 2,843'						
Tail: 3,938' - 4,438'	270	500	Class C + 0.2% PF13	6.35	14.80	1.33
<u>PRODUCTION:</u>						
Stage 1						
Lead: 0' - 6,500'	840	6,500	Tuned Light + 0.75 CFR-3 + 1.5 lb/sk NaCl + 0.25 lb/sk Pol E Flake	12.9	10.20	2.70
Tail: 6,500' - 7,000'	90	500	VersaCem-PBSH2 + 0.5% HALAD-344 + 0.4% CFR-3 + 1.0 lb/sk NaCl	8.80	13.00	1.67
DV tool set @ 7,000'						
Stage 2						
Lead: 7,000' - 10,494'	350	3494	Tuned Light + 0.75 CFR-3 + 1.5 lb/sk NaCl + 0.25 lb/sk Pol-E-Flake	12.27	10.20	2.70
Tail: 10,494 - 14,780'	860	4286	HalCem C	6.38	14.80	1.33

BOPCO L.P. plans to drill a pilot hole to a total depth of 11,325' (TVD). After drilling pilot hole, BOPCO will set two cement plugs in order to plug back the pilot hole to a depth of 9,925'. The cement plug intervals will be a bottom plug from a depth of 11,325' TVD up to a depth of 10,625' TVD, followed by a kick off plug from a depth of 10,625' TVD to a depth of 9,925' TVD.

The cement excess pumped will be 100% above gauge hole.

Please see page ⁷ of the 8pt drilling program for cement plug information.

Cement excesses will be as follows:

Surface – 100% excess with cement circulated to surface.

1st Intermediate – 50% excess above fluid caliper with cement circulated to surface.

2nd Intermediate – 50% excess above fluid caliper with cement circulated to surface.

Production – 50% above gauge hole or 35% above electric log caliper with cement circulated 500' up into the 9-5/8" 1st intermediate casing in areas outside the SOPA. Cement will be circulated to surface on areas inside the SOPA.

Cement volumes will be adjusted proportionately for depth changes of the multi stage tool.

E) DIRECTIONAL DRILLING

BOPCO, L.P. plans to drill out the 9-5/8" intermediate casing with a 7-7/8" bit to a TVD of approximately 10,494' at which point a directional hole will be kicked off and drilled at an azimuth of 276.297 degrees, building angle at 12.01 deg/100' to 60 degrees at a TVD of 10,908' (MD 10,494'). This angle and azimuth will be maintained for 200' to a TVD of 11,008' (11,197' MD). From this depth the curve will be finished and lateral drilled at an azimuth of 276.29 degrees. The lateral section will reach TD at a TVD of 11,062' (14,780' MD). At TD a full production string of 5-1/2", 17 ppf, P-110, LTC will be run in the hole and cement circulated to surface.

F) H₂S SAFETY EQUIPMENT

As stated in the BLM Onshore Order 6, for wells located inside the H₂S area, H₂S equipment will be rigged up after setting surface casing. For the wells located inside the H₂S area the flare pit will be located 150' from the location. For wells located outside the H₂S area flare pit will be located 100' away from the location. (See page 6 of Survey plat package) There is not any H₂S anticipated in the area, although in the event that H₂S is encountered, the H₂S contingency plan attached will be implemented. (Please refer to diagram B or C for choke manifold and closed loop system for layout if H₂S is encountered.) Please refer to H₂S location diagram for location of important H₂S safety items.

G) CLOSED LOOP AND CHOKE MANIFOLD

Please see diagram A, B or C

H) MUD MONITORING SYSTEM

1. BOPCO L.P. plans to drill the proposed well with water and does not expect to mud up. In the event of abnormal pressures that require mudding up, BOPCO L.P will record slow pump rates on the daily drilling report on a daily basis.
2. Visual mud monitoring equipment will be installed to detect volume changes.
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5. BOPCO L.P will be using a 3M system so trip tanks will not be required per Onshore order #2.
6. Gas detections systems will be installed on exploratory wells per Onshore order #2. Please refer to section G under point 6 in the 8pt drilling program for H2S safety information.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Delaware section. A BHP of 5181 psi (max) or MWE of 9.0 ppg is expected. Lost circulation may exist in the Delaware Section from 4,418'-8,500' TVD.

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

50 days drilling operations

14 days completion operations

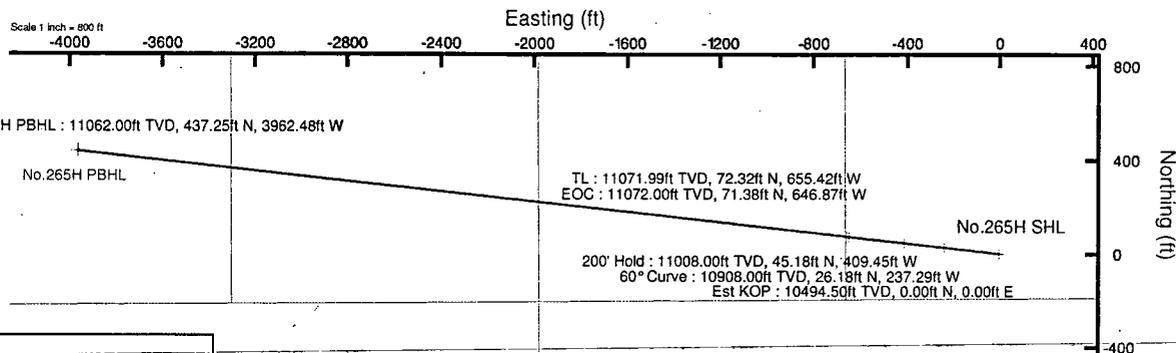
JDB



BOPCO, L.P.

Location: Eddy County, NM
 Field: Big Eddy
 Facility: Big Eddy Unit No.265H

Slot: No.265H SHL
 Well: No.265H
 Wellbore: No.265H PWB

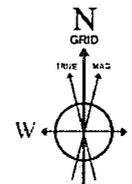


Well-Profile Data

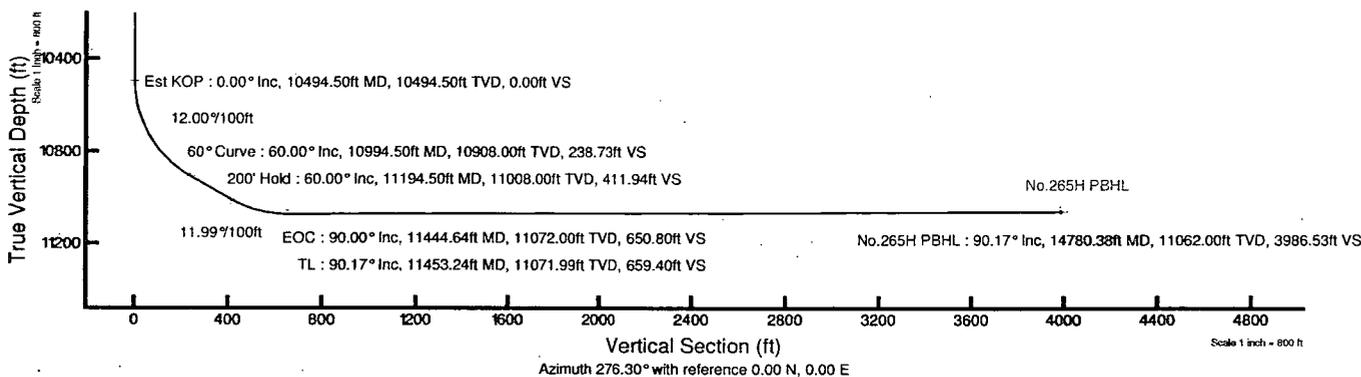
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	29.00	0.000	276.297	29.00	0.00	0.00	0.00	0.00
Est KOP	10494.50	0.000	276.297	10494.50	0.00	0.00	0.00	0.00
60° Curve	10994.50	60.000	276.297	10908.00	26.18	-237.29	12.00	238.73
200' Hold	11194.50	60.000	276.297	11008.00	45.18	-409.45	0.00	411.94
EOC	11444.64	90.000	276.297	11072.00	71.38	-646.87	11.99	650.80
TL	11453.24	90.172	276.297	11071.99	72.32	-655.42	2.00	659.40
No.265H PBHL	14780.38	90.172	276.297	11062.00	437.25	-3962.48	0.00	3986.53

Plot reference wellpath is Rev-B.0

True vertical depths are referenced to Rig on No.265H SHL (KB)	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No.265H SHL (KB)	North Reference: Grid north
Rig on No.265H SHL (KB) to Mean Sea Level: 3493 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No.265H SHL): -3464 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gentry on 11/07/2012



BGGM (1945.0 to 2014.0) Dip: 60.43° Field: 48670.2 nT
 Magnetic North is 7.68 degrees East of True North (at 11/06/2012)
 Grid North is 0.26 degrees East of True North
 To correct azimuth from True to Grid subtract 0.26 degrees
 To correct azimuth from Magnetic to Grid add 7.43 degrees
 For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.43 = 97.43





Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.265H SHL
Area	Eddy County, NM	Well	No.265H
Field	Big Eddy	Wellbore	No.265H PWB
Facility	Big Eddy Unit No.265H		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 3.0.0
North Reference	Grid	User	Gentbry
Scale	0.999934	Report Generated	11/07/2012 at 11:29:50 AM
Convergence at slot	0.26° East	Database/Source file	WA Midland/No.265H_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W
Facility Reference Pt			646139.62	589950.15	32°37'15.527"N	103°51'31.258"W
Field Reference Pt			610823.03	524402.80	32°26'28.262"N	103°58'26.774"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No.265H SHL (KB) to Facility Vertical Datum	29.00ft
Horizontal Reference Pt	Slot	Rig on No.265H SHL (KB) to Mean Sea Level	3493.00ft
Vertical Reference Pt	Rig on No.265H SHL (KB)	Rig on No.265H SHL (KB) to Mud Line at Slot (No.265H SHL)	29.00ft
MD Reference Pt	Rig on No.265H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	276.30°



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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.265H SHL
Area	Eddy County, NM	Well	No.265H
Field	Big Eddy	Wellbore	No.265H PWB
Facility	Big Eddy Unit No.265H		

WELLPATH DATA (163 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	276.297	0.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
29.00	0.000	276.297	29.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	Tic On
129.00†	0.000	276.297	129.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
229.00†	0.000	276.297	229.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
329.00†	0.000	276.297	329.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
429.00†	0.000	276.297	429.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
529.00†	0.000	276.297	529.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
629.00†	0.000	276.297	629.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
729.00†	0.000	276.297	729.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
829.00†	0.000	276.297	829.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
833.00†	0.000	276.297	833.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	T/Rustler
903.00†	0.000	276.297	903.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	T/Salt
929.00†	0.000	276.297	929.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
1029.00†	0.000	276.297	1029.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
1129.00†	0.000	276.297	1129.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
1229.00†	0.000	276.297	1229.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
1329.00†	0.000	276.297	1329.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
1429.00†	0.000	276.297	1429.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
1529.00†	0.000	276.297	1529.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
1629.00†	0.000	276.297	1629.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
1729.00†	0.000	276.297	1729.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
1829.00†	0.000	276.297	1829.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
1929.00†	0.000	276.297	1929.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
2029.00†	0.000	276.297	2029.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
2053.00†	0.000	276.297	2053.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	B/Salt
2129.00†	0.000	276.297	2129.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
2229.00†	0.000	276.297	2229.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
2329.00†	0.000	276.297	2329.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
2429.00†	0.000	276.297	2429.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
2529.00†	0.000	276.297	2529.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
2629.00†	0.000	276.297	2629.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
2729.00†	0.000	276.297	2729.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
2829.00†	0.000	276.297	2829.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
2893.00†	0.000	276.297	2893.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	T/Capitan Reef
2929.00†	0.000	276.297	2929.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
3029.00†	0.000	276.297	3029.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
3129.00†	0.000	276.297	3129.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
3229.00†	0.000	276.297	3229.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
3329.00†	0.000	276.297	3329.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
3429.00†	0.000	276.297	3429.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
3529.00†	0.000	276.297	3529.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
3629.00†	0.000	276.297	3629.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
3729.00†	0.000	276.297	3729.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
3829.00†	0.000	276.297	3829.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
3929.00†	0.000	276.297	3929.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.265H SHL
Area	Eddy County, NM	Well	No.265H
Field	Big Eddy	Wellbore	No.265H PWB
Facility	Big Eddy Unit No.265H		

WELLPATH DATA (163 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4029.00†	0.000	276.297	4029.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
4129.00†	0.000	276.297	4129.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
4229.00†	0.000	276.297	4229.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
4329.00†	0.000	276.297	4329.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
4418.00†	0.000	276.297	4418.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	T/Delaware Mountain Grp.
4429.00†	0.000	276.297	4429.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
4443.00†	0.000	276.297	4443.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	T/1st Delaware Sand
4529.00†	0.000	276.297	4529.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
4629.00†	0.000	276.297	4629.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
4729.00†	0.000	276.297	4729.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
4829.00†	0.000	276.297	4829.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
4929.00†	0.000	276.297	4929.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
5029.00†	0.000	276.297	5029.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
5129.00†	0.000	276.297	5129.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
5229.00†	0.000	276.297	5229.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
5329.00†	0.000	276.297	5329.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
5429.00†	0.000	276.297	5429.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
5529.00†	0.000	276.297	5529.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
5629.00†	0.000	276.297	5629.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
5729.00†	0.000	276.297	5729.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
5829.00†	0.000	276.297	5829.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
5929.00†	0.000	276.297	5929.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
6029.00†	0.000	276.297	6029.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
6129.00†	0.000	276.297	6129.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
6229.00†	0.000	276.297	6229.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
6329.00†	0.000	276.297	6329.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
6429.00†	0.000	276.297	6429.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
6529.00†	0.000	276.297	6529.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
6629.00†	0.000	276.297	6629.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
6729.00†	0.000	276.297	6729.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
6829.00†	0.000	276.297	6829.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
6929.00†	0.000	276.297	6929.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
6983.00†	0.000	276.297	6983.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	T/Bone Spring Lime
7029.00†	0.000	276.297	7029.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
7129.00†	0.000	276.297	7129.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
7229.00†	0.000	276.297	7229.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
7329.00†	0.000	276.297	7329.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
7429.00†	0.000	276.297	7429.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
7529.00†	0.000	276.297	7529.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
7629.00†	0.000	276.297	7629.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
7729.00†	0.000	276.297	7729.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
7829.00†	0.000	276.297	7829.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
7929.00†	0.000	276.297	7929.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
8029.00†	0.000	276.297	8029.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
8129.00†	0.000	276.297	8129.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.265H SHL
Area	Eddy County, NM	Well	No.265H
Field	Big Eddy	Wellbore	No.265H PWB
Facility	Big Eddy Unit No.265H		

WELLPATH DATA (163 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8229.00†	0.000	276.297	8229.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
8329.00†	0.000	276.297	8329.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
8429.00†	0.000	276.297	8429.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
8529.00†	0.000	276.297	8529.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
8629.00†	0.000	276.297	8629.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
8729.00†	0.000	276.297	8729.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
8829.00†	0.000	276.297	8829.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
8929.00†	0.000	276.297	8929.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
9029.00†	0.000	276.297	9029.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
9129.00†	0.000	276.297	9129.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
9229.00†	0.000	276.297	9229.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
9329.00†	0.000	276.297	9329.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
9429.00†	0.000	276.297	9429.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
9529.00†	0.000	276.297	9529.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
9629.00†	0.000	276.297	9629.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
9729.00†	0.000	276.297	9729.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
9829.00†	0.000	276.297	9829.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
9929.00†	0.000	276.297	9929.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
10029.00†	0.000	276.297	10029.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
10129.00†	0.000	276.297	10129.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
10229.00†	0.000	276.297	10229.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
10258.00†	0.000	276.297	10258.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	T/Wolfcamp
10329.00†	0.000	276.297	10329.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
10429.00†	0.000	276.297	10429.00	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	
10494.50	0.000	276.297	10494.50	0.00	0.00	0.00	646139.62	589950.15	32°37'15.527"N	103°51'31.258"W	0.00	Est KOP
10529.00†	4.140	276.297	10528.97	1.25	0.14	-1.24	646138.38	589950.29	32°37'15.528"N	103°51'31.272"W	12.00	
10629.00†	16.140	276.297	10627.23	18.82	2.06	-18.71	646120.92	589952.22	32°37'15.548"N	103°51'31.476"W	12.00	
10729.00†	28.140	276.297	10719.69	56.44	6.19	-56.10	646083.53	589956.34	32°37'15.591"N	103°51'31.913"W	12.00	
10829.00†	40.140	276.297	10802.30	112.46	12.33	-111.78	646027.85	589962.49	32°37'15.654"N	103°51'32.564"W	12.00	
10929.00†	52.140	276.297	10871.46	184.43	20.23	-183.32	645956.32	589970.38	32°37'15.735"N	103°51'33.400"W	12.00	
10994.50	60.000	276.297	10908.00	238.73	26.18	-237.29	645902.35	589976.33	32°37'15.796"N	103°51'34.031"W	12.00	60° Curve
11029.00†	60.000	276.297	10925.25	268.61	29.46	-266.99	645872.65	589979.61	32°37'15.830"N	103°51'34.378"W	0.00	
11129.00†	60.000	276.297	10975.25	355.21	38.96	-353.07	645786.58	589989.11	32°37'15.928"N	103°51'35.384"W	0.00	
11194.50	60.000	276.297	11008.00	411.94	45.18	-409.45	645730.20	589995.33	32°37'15.992"N	103°51'36.042"W	0.00	200' Hold
11229.00†	64.138	276.297	11024.15	442.41	48.52	-439.74	645699.91	589998.67	32°37'16.026"N	103°51'36.396"W	11.99	
11329.00†	76.131	276.297	11058.07	536.29	58.82	-533.05	645606.61	590008.97	32°37'16.132"N	103°51'37.487"W	11.99	
11429.00†	88.125	276.297	11071.74	635.17	69.67	-631.33	645508.33	590019.81	32°37'16.244"N	103°51'38.635"W	11.99	
11444.64	90.000	276.297	11072.00	650.80	71.38	-646.87	645492.79	590021.53	32°37'16.262"N	103°51'38.817"W	11.99	EOC
11453.24	90.172	276.297	11071.99	659.40	72.32	-655.42	645484.25	590022.47	32°37'16.271"N	103°51'38.917"W	2.00	TL
11529.00†	90.172	276.297	11071.76	735.16	80.63	-730.73	645408.95	590030.78	32°37'16.357"N	103°51'39.797"W	0.00	
11629.00†	90.172	276.297	11071.46	835.16	91.60	-830.12	645309.56	590041.75	32°37'16.470"N	103°51'40.958"W	0.00	
11729.00†	90.172	276.297	11071.16	935.16	102.57	-929.52	645210.17	590052.72	32°37'16.583"N	103°51'42.120"W	0.00	
11829.00†	90.172	276.297	11070.86	1035.16	113.54	-1028.92	645110.78	590063.68	32°37'16.696"N	103°51'43.281"W	0.00	
11929.00†	90.172	276.297	11070.56	1135.16	124.51	-1128.31	645011.39	590074.65	32°37'16.808"N	103°51'44.443"W	0.00	
12029.00†	90.172	276.297	11070.26	1235.16	135.47	-1227.71	644912.00	590085.62	32°37'16.921"N	103°51'45.604"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No.265H SHL
Area	Eddy County, NM	Well	No.265H
Field	Big Eddy	Wellbore	No.265H PWB
Facility	Big Eddy Unit No.265H		

WELLPATH DATA (163 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12129.00†	90.172	276.297	11069.96	1335.16	146.44	-1327.11	644812.61	590096.58	32°37'17.034"N	103°51'46.766"W	0.00	
12229.00†	90.172	276.297	11069.66	1435.16	157.41	-1426.50	644713.22	590107.55	32°37'17.147"N	103°51'47.927"W	0.00	
12329.00†	90.172	276.297	11069.36	1535.16	168.38	-1525.90	644613.83	590118.52	32°37'17.260"N	103°51'49.089"W	0.00	
12429.00†	90.172	276.297	11069.06	1635.16	179.35	-1625.29	644514.44	590129.49	32°37'17.373"N	103°51'50.250"W	0.00	
12529.00†	90.172	276.297	11068.76	1735.16	190.31	-1724.69	644415.05	590140.45	32°37'17.486"N	103°51'51.412"W	0.00	
12629.00†	90.172	276.297	11068.46	1835.16	201.28	-1824.09	644315.66	590151.42	32°37'17.599"N	103°51'52.573"W	0.00	
12729.00†	90.172	276.297	11068.16	1935.16	212.25	-1923.48	644216.27	590162.39	32°37'17.711"N	103°51'53.735"W	0.00	
12829.00†	90.172	276.297	11067.86	2035.16	223.22	-2022.88	644116.88	590173.36	32°37'17.824"N	103°51'54.896"W	0.00	
12929.00†	90.172	276.297	11067.56	2135.16	234.19	-2122.28	644017.49	590184.32	32°37'17.937"N	103°51'56.058"W	0.00	
13029.00†	90.172	276.297	11067.26	2235.16	245.15	-2221.67	643918.10	590195.29	32°37'18.050"N	103°51'57.219"W	0.00	
13129.00†	90.172	276.297	11066.96	2335.16	256.12	-2321.07	643818.71	590206.26	32°37'18.163"N	103°51'58.381"W	0.00	
13229.00†	90.172	276.297	11066.66	2435.16	267.09	-2420.46	643719.32	590217.22	32°37'18.276"N	103°51'59.543"W	0.00	
13329.00†	90.172	276.297	11066.36	2535.16	278.06	-2519.86	643619.94	590228.19	32°37'18.389"N	103°52'00.704"W	0.00	
13429.00†	90.172	276.297	11066.06	2635.15	289.03	-2619.26	643520.55	590239.16	32°37'18.501"N	103°52'01.866"W	0.00	
13529.00†	90.172	276.297	11065.76	2735.15	299.99	-2718.65	643421.16	590250.13	32°37'18.614"N	103°52'03.027"W	0.00	
13629.00†	90.172	276.297	11065.46	2835.15	310.96	-2818.05	643321.77	590261.09	32°37'18.727"N	103°52'04.189"W	0.00	
13729.00†	90.172	276.297	11065.16	2935.15	321.93	-2917.45	643222.38	590272.06	32°37'18.840"N	103°52'05.350"W	0.00	
13829.00†	90.172	276.297	11064.86	3035.15	332.90	-3016.84	643122.99	590283.03	32°37'18.953"N	103°52'06.512"W	0.00	
13929.00†	90.172	276.297	11064.56	3135.15	343.87	-3116.24	643023.60	590294.00	32°37'19.066"N	103°52'07.673"W	0.00	
14029.00†	90.172	276.297	11064.26	3235.15	354.84	-3215.63	642924.21	590304.96	32°37'19.178"N	103°52'08.835"W	0.00	
14129.00†	90.172	276.297	11063.96	3335.15	365.80	-3315.03	642824.82	590315.93	32°37'19.291"N	103°52'09.996"W	0.00	
14229.00†	90.172	276.297	11063.66	3435.15	376.77	-3414.43	642725.43	590326.90	32°37'19.404"N	103°52'11.158"W	0.00	
14329.00†	90.172	276.297	11063.35	3535.15	387.74	-3513.82	642626.04	590337.86	32°37'19.517"N	103°52'12.319"W	0.00	
14429.00†	90.172	276.297	11063.05	3635.15	398.71	-3613.22	642526.65	590348.83	32°37'19.630"N	103°52'13.481"W	0.00	
14529.00†	90.172	276.297	11062.75	3735.15	409.68	-3712.62	642427.26	590359.80	32°37'19.742"N	103°52'14.642"W	0.00	
14629.00†	90.172	276.297	11062.45	3835.15	420.64	-3812.01	642327.87	590370.77	32°37'19.855"N	103°52'15.804"W	0.00	
14729.00†	90.172	276.297	11062.15	3935.15	431.61	-3911.41	642228.48	590381.73	32°37'19.968"N	103°52'16.966"W	0.00	
14780.38	90.172	276.297	11062.00	3986.53	437.25	-3962.48	642177.41	590387.37	32°37'20.026"N	103°52'17.562"W	0.00	No.265H PBHL



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REFERENCE WELLPATH IDENTIFICATION

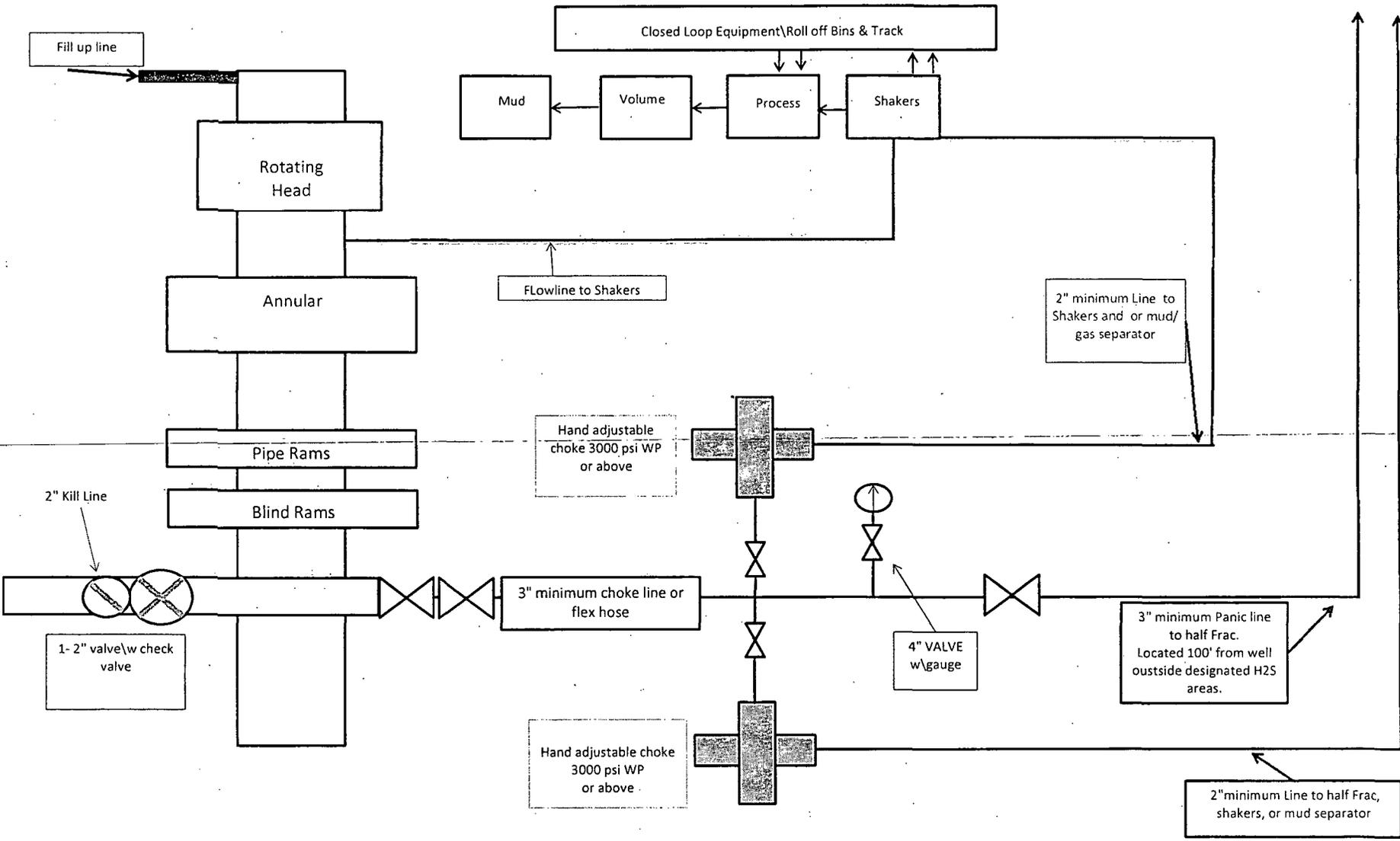
Operator	BOPCO, L.P.	Slot	No.265H SHL
Area	Eddy County, NM	Well	No.265H
Field	Big Eddy	Wellbore	No.265H PWB
Facility	Big Eddy Unit No.265H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) No.265H PBHL	14780.38	11062.00	437.25	-3962.48	642177.41	590387.37	32°37'20.026"N	103°52'17.562"W	point

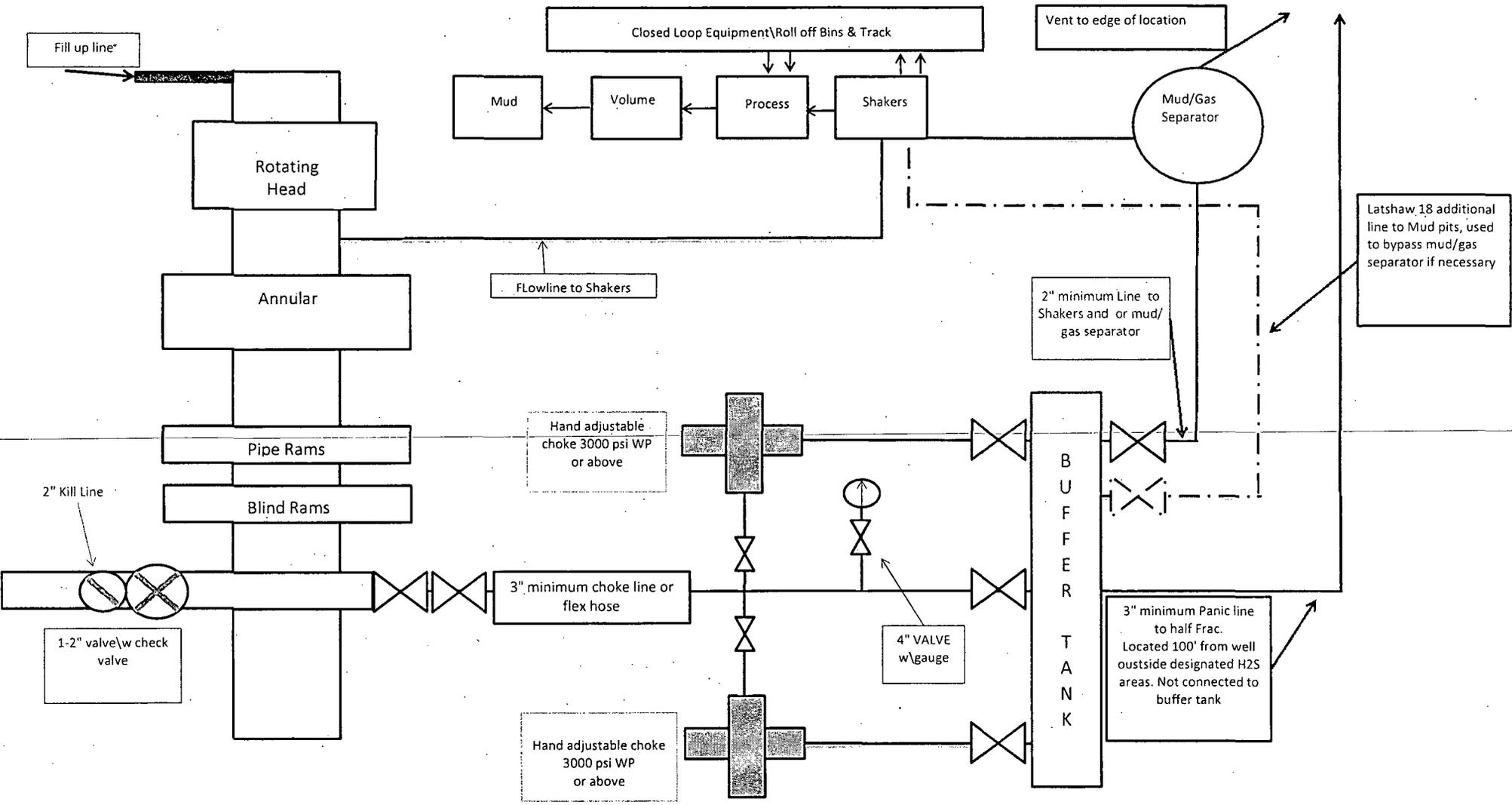
SURVEY PROGRAM - Ref Wellbore: No.265H PWB Ref Wellpath: Rev-B.0

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
29.00	14780.38	NaviTrak (Standard)		No.265H PWB



13-5/8" X 3-M BOPE (2 Rams and Rotating Head) & Closed Loop System Equipment Schematic Diagram 2

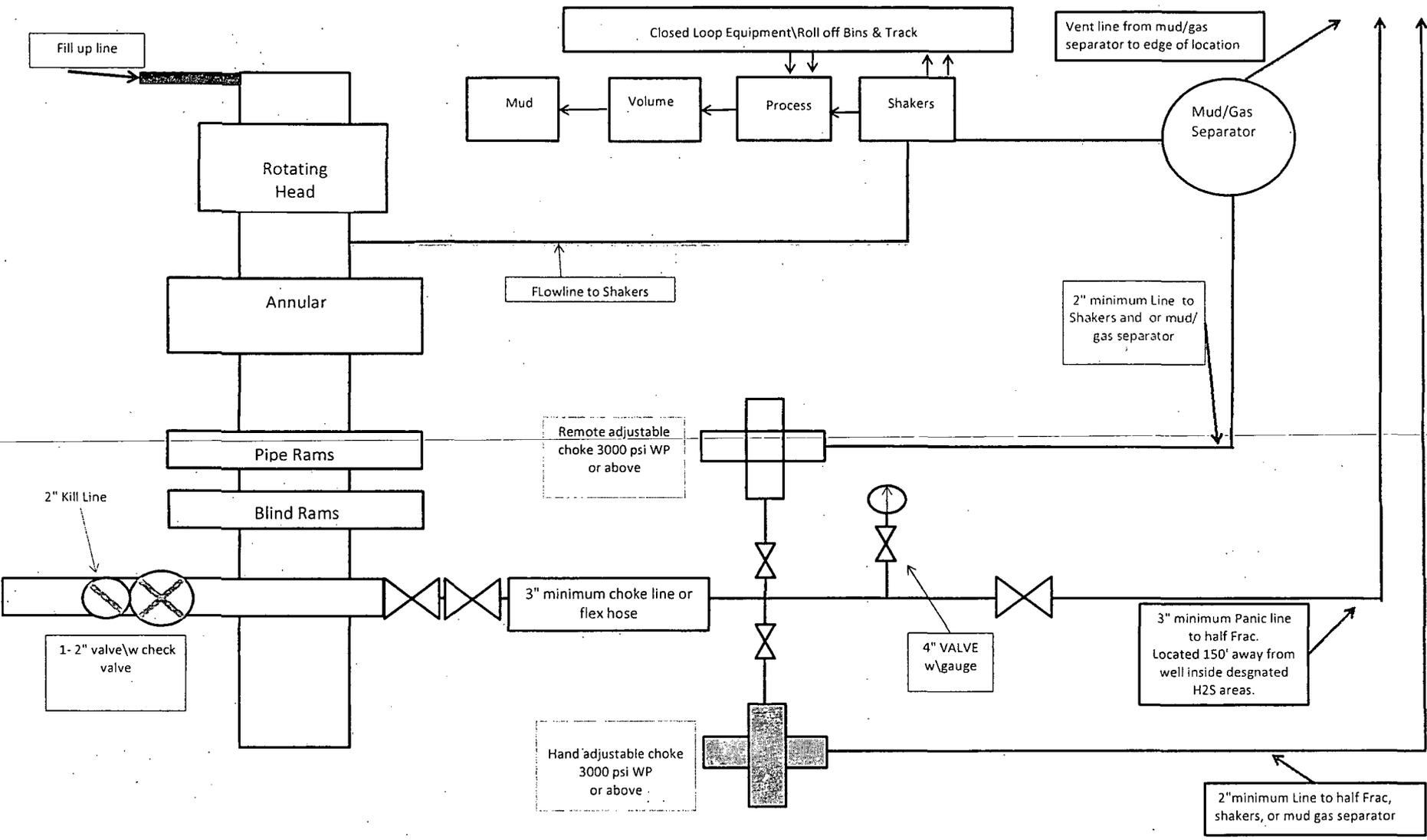
Note: all valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.



Latshaw 4 closed loop system, with Latshaw 18 addition "clouded."

Latshaw 13-5/8" X 3-M BOPE (2 Rams and Rotating Head) & Closed Loop System Equipment Schematic Diagram 2

Note: all valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.



13-5/8" X 3-M BOPE (2 Rams and Rotating Head) & Closed Loop System Equipment Schematic H2S contingency Diagram 2

Note: all valves & lines on choke manifold are 3" unless otherwise noted. Exact manifold configuration may vary.



Midwest Hose
& Specialty, Inc.

INTERNAL HYDROSTATIC TEST REPORT			
Customer:		Customer P.O. Number:	
LATSHAW		RIG 18	
HOSE SPECIFICATIONS			
Type:	Rotary / Vibrator Hose GRADE D / API 7K		Hose Length: 42 FEET
I.D.	3.5	INCHES	O.D. 4 48/64 INCHES
WORKING PRESSURE	TEST PRESSURE		BURST PRESSURE
7,500	PSI	15,000	PSI
			N/A
			PSI
COUPLINGS			
Part Number	Stem Lot Number		Ferrule Lot Number
E3.5X80M1002	LOT 1012		LOT 1012
E3.5X80F1002	LOT 1012		LOT 1012
Type of Coupling:	Die Size:		
Swage-It	5.75 INCHES		
PROCEDURE			
<i>Hose assembly pressure tested with water at ambient temperature.</i>			
TIME HELD AT TEST PRESSURE		ACTUAL BURST PRESSURE:	
1 1/2		N/A	
MIN.		PSI	
Hose Assembly Serial Number:		Hose Serial Number:	
137827-1		7636	
Comments:			
Date:	Tested:	Approved:	
2/14/2012	<i>Dave McNamee</i>	<i>Patrick Magill</i>	



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Graph

February 13, 2012

Customer: Latshaw

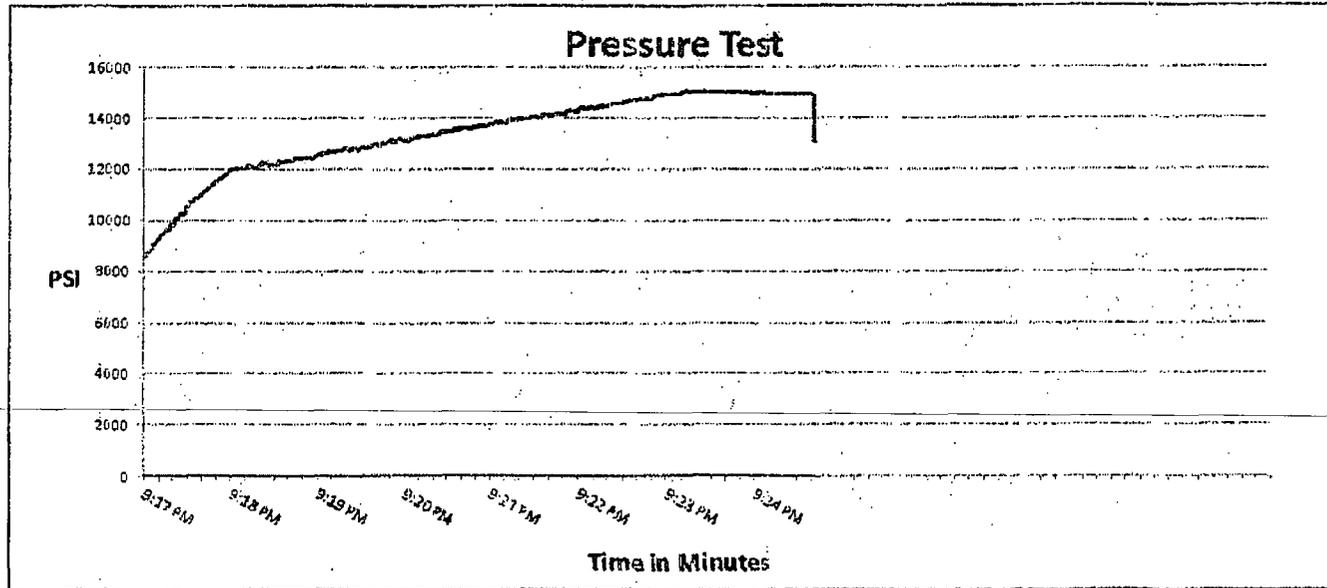
Pick Ticket #: 137827

Hose Specifications

Hose Type E	Length 42'
I.D. 3.5"	O.D. 5.16"
Working Pressure 7500 PSI	Burst Pressure Standard Safety Multiplier Applies

Verification

Type of Fitting S"1002	Coupling Method Swage
Die Size 5.75"	Final O.D. 5.49/64"
Hose Serial # 7636	Hose Assembly Serial # 137827 1



Test Pressure
15000 PSI

Time Held at Test Pressure
1 2/4 Minutes

Actual Burst Pressure

Peak Pressure
15146 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Donnie Mclemore

Approved By: Preston Morgan



Midwest Hose & Specialty, Inc.

INTERNAL HYDROSTATIC TEST REPORT			
Customer:		Customer P.O. Number:	
LATSHAW		RIG 18	
HOSE SPECIFICATIONS			
Type:	Rotary / Vibrator Hose GRADE D /API 7K		Hose Length: 42 FEET
I.D.	3.5 INCHES	O.D.	5 29/64 INCHES
WORKING PRESSURE	TEST PRESSURE		BURST PRESSURE
7,500 PSI	15,000 PSI		N/A PSI
COUPLINGS			
Part Number	Stem Lot Number	Ferrule Lot Number	
E3.5X80M1002	LOT 1012	LOT 1012	
E3.5X80F1002	LOT 1012	LOT 1012	
Type of Coupling:		Die Size:	
Swage-It		5.75 INCHES	
PROCEDURE			
<i>Hose assembly pressure tested with water at ambient temperature.</i>			
TIME HELD AT TEST PRESSURE		ACTUAL BURST PRESSURE:	
1 1/4 MIN.		N/A PSI	
Hose Assembly Serial Number:		Hose Serial Number:	
137827-2		7636	
Comments:			
Date:	Tested:	Approved:	
2/14/2012	<i>David Williams</i>	<i>Paul Marshall</i>	



Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

February 13, 2012

Customer: Latshaw

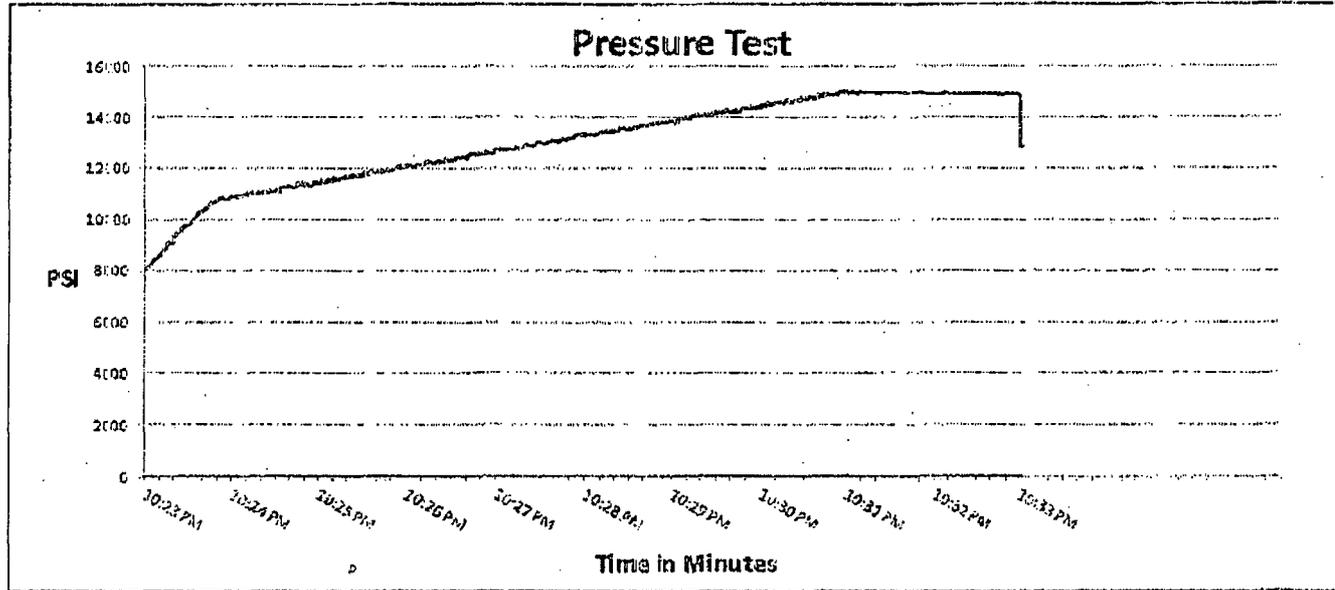
Pick Ticket #: 137827

Hose Specifications

<u>Hose Type</u>	<u>Length</u>
E	42
<u>I.D.</u>	<u>O.D.</u>
1.5"	5 23/64
<u>Working Pressure</u>	<u>Burst Pressure</u>
7500 PSI	Standard Safety Multiplier Applied

Verification

<u>Type of Fitting</u>	<u>Coupling Method</u>
5"1002	Swage
<u>Die Size</u>	<u>Final O.D.</u>
5.75"	5 3/4
<u>Hose Serial #</u>	<u>Hose Assembly Serial #</u>
7636	1378272



Test Pressure
15000 PSI

Time Held at Test Pressure
1 1/4 Minutes

Actual Burst Pressure

Peak Pressure
15131 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Donna McEmore

Approved By: Preston Morgan

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- C. Emergency Rescue

H₂S CONTINGENCY PLAN SECTION

Scope:

This contingency plan provides an organized plan of action for alerting and protecting the public within an area of exposure prior to an intentional release, or following the accidental release of a potentially hazardous volume of hydrogen sulfide. The plan establishes guidelines for all personnel whose work activity may involve exposure to Hydrogen Sulfide Gas (H₂S).

Objective:

Prevent any and all accidents, and prevent the uncontrolled release of H₂S into the atmosphere.

Provide proper evacuation procedures to cope with emergencies.

Provide immediate and adequate medical attention should an injury occur.

Discussion of Plan:

Suspected Problem Zones:

Implementation: This plan, with all details, is to be fully implemented 500' above or three days prior to drilling into the first known sour zone

Emergency Response and Public Protection Procedure: This section outlines the conditions and denotes steps to be taken in the event of an emergency.

Emergency Equipment and Procedure: This section outlines the safety and emergency equipment that will be required for the drilling of this well.

Training Provisions: This section outlines the training provisions that must be adhered to 500 feet above or three days prior to drilling into the first known sour zone.

Emergency call lists: Included are the telephone numbers of all persons that would need to be contacted should an H₂S emergency occur.

Briefing: This section deals with the briefing of all persons involved with the drilling of this well.

Public Safety: Public Safety Personnel will be made aware of the drilling of this well.

EMERGENCY PROCEDURES AND PUBLIC PROTECTION SECTION

- I. In the event of any evidence of H₂S levels above 10 ppm, take the following steps immediately:
 - A. Secure breathing apparatus.
 - B. Order non-essential personnel out of the danger zone.
 - C. Take steps to determine if the H₂S level can be corrected or suppressed, and if so, proceed with normal operations.
- II. If uncontrollable conditions occur, proceed with the following:
 - A. Take steps to protect and/or remove any public downwind of the rig, including partial evacuation or isolation. Notify necessary public safety personnel and the New Mexico Oil & Gas of the situation.
 - B. Isolate area and prevent entry by unauthorized persons into the 100 ppm ROE.
 - C. Remove all personnel to the Safe Briefing Area.
 - D. Notify public safety personnel for help with maintaining roadblocks and implementing evacuation. Phone number list attached.
 - E. Determine and proceed with the best possible plan to regain control of the well. Maintain tight security and safety measures.
- III. Responsibility:
 - A. The Company Approved Supervisor shall be responsible for the total implementation of the plan.
 - B. The Company Approved Supervisor shall be in complete command during any emergency.
 - C. The Company Approved Supervisor shall designate a back up Supervisor in the event that he/she is not available.

EMERGENCY PROCEDURE IMPLEMENTATION

I. Drilling or Tripping

A. All Personnel

1. When alarm sounds, don escape unit and report to upwind Safe Briefing Area.
2. Check status of other personnel (buddy system).
3. Secure breathing apparatus.
4. Wait for orders from supervisor.

B. Drilling Foreman

1. Report to the upwind Safe Briefing Area.
2. Don Breathing Apparatus and return to the point of release with the Tool Pusher or Driller (buddy system).
3. Determine the concentration of H₂S.
4. Assess the situation and take appropriate control measures.

C. Tool Pusher

1. Report to the upwind Safe Briefing Area.
2. Don breathing apparatus and return to the point of release with the Drilling Foreman or the Driller (buddy system).
3. Determine the concentration.
4. Assess the situation and take appropriate control measures.

D. Driller

1. Check the status of other personnel (in a rescue attempt, always use the buddy system).
2. Assign the least essential person to notify the Drilling Foreman and Tool Pusher, in the event of their absence.

3. Assume the responsibility of the Drilling Foreman and the Tool Pusher until they arrive, in the event of their absence.

E. Derrick Man and Floor Hands

1. Remain in the upwind Safe Briefing Area until otherwise instructed by a supervisor.

F. Mud Engineer

1. Report to the upwind Safe Briefing Area.
2. When instructed, begin check of mud for pH level and H₂S level.

G. On-site Safety Personnel

1. Don Breathing Apparatus.
2. Check status of all personnel.
3. Wait for instructions from Drilling Foreman or Tool Pusher.

II. Taking a Kick

- A. All personnel report to the upwind Safe Briefing Area.
- B. Follow standard BOP procedures.

III. Open Hole Logging

- A. All unnecessary personnel should leave the rig floor.
- B. Drilling Foreman and Safety Personnel should monitor the conditions and make necessary safety equipment recommendations.

IV. Running Casing or Plugging

- A. Follow "Drilling or Tripping" procedures.
- B. Assure that all personnel have access to protective equipment.

SIMULATED BLOWOUT CONTROL DRILLS

All drills will be initiated by activating alarm devices (air horn). Use one long blast on the air horn for ACTUAL and SIMULATED Blowout Control Drills. This operation will be performed by the Drilling Foreman or Tool Pusher at least one time per week for each of the following conditions, with each crew:

Drill # 1 Bottom Drilling

Drill # 2 Tripping Drill Pipe

In each of these drills, the initial reaction time to shutting in the well shall be timed as well as the total time for the crew to complete its entire pit drill assignment. The times must be recorded on the IADC Driller's Log as "Blowout Control Drill".

Drill No.:			
Reaction Time to Shut-In:		minutes,	seconds.
Total Time to Complete Assignment:		minutes,	seconds.

I. Drill Overviews

A. Drill No. 1- Bottom Drilling

1. Sound the alarm immediately.
2. Stop the rotary and hoist kelly joint above the rotary table.
3. Stop the circulatory pump.
4. Close the drill pipe rams.
5. Record casing and drill pipe shut-in pressures and pit volume increases.

B. Drill No. 2 – Tripping Drill Pipe

1. Sound the alarm immediately.
2. Position the upper tool joint just above the rotary table and set the slips.

3. Install a full opening valve or inside blowout preventor tool in order to close the drill pipe.
4. Close the drill pipe rams.
5. Record the shut-in annular pressure.

II. Crew Assignments

A. Drill No. 1 – Bottom Drilling

1. Driller
 - a) Stop the rotary and hoist kelly joint above the rotary table.
 - b) Stop the circulatory pump.
 - c) Check flow.
 - d) If flowing, sound the alarm immediately.
 - e) Record the shut-in drill pipe pressure.
 - f) Determine the mud weight increase needed or other courses of action.
2. Derrickman
 - a) Open choke line valve at BOP.
 - b) Signal Floor Man # 1 at accumulator that choke line is open.
 - c) Close choke and upstream valve after pipe tams have been closed.
 - d) Read the shut-in annular pressure and report readings to Driller.
3. Floor Man # 1
 - a) Close the pipe rams after receiving the signal from the Derrickman.
 - b) Report to Driller for further instructions.

4. Floor Man # 2

- a) Notify the Tool Pusher and Operator Representative of the H₂S alarms.
- b) Check for open fires and, if safe to do so, extinguish them.
- c) Stop all welding operations.
- d) Turn-off all non-explosion proof lights and instruments.
- e) Report to Driller for further instructions.

5. Tool Pusher

- a) Report to the rig floor.
- b) Have a meeting with all crews.
- c) Compile and summarize all information.
- d) Calculate the proper kill weight.
- e) Ensure that proper well procedures are put into action.

6. Operator Representative

- a) Notify the Drilling Superintendent.
- b) Determine if an emergency exists and if so, activate the contingency plan.

B. Drill No. 2 – Tripping Pipe

1. Driller

- a) Sound the alarm immediately when mud volume increase has been detected.
- b) Position the upper tool joint just above the rotary table and set slips.
- c) Install a full opening valve or inside blowout preventor tool to close the drill pipe.
- d) Check flow.

e) Record all data reported by the crew.

f) Determine the course of action.

2. Derrickman

a) Come down out of derrick.

b) Notify Tool Pusher and Operator Representative.

c) Check for open fires and, if safe to do so, extinguish them.

d) Stop all welding operations.

e) Report to Driller for further instructions.

3. Floor Man # 1

a) Pick up full opening valve or inside blowout preventor tool and stab into tool joint above rotary table (with Floor Man # 2).

b) Tighten valve with back-up tongs.

c) Close pipe rams after signal from Floor Man # 2.

d) Read accumulator pressure and check for possible high pressure fluid leaks in valves or piping.

e) Report to Driller for further instructions.

4. Floor Man # 2

a) Pick-up full opening valve or inside blowout preventor tool and stab into tool joint above rotary table (with Floor Man # 1).

b) Position back-up tongs on drill pipe.

c) Open choke line valve at BOP.

d) Signal Floor Man # 1 at accumulator that choke line is open.

e) Close choke and upstream valve after pipe rams have been closed.

f) Check for leaks on BOP stack and choke manifold.

- g) Read annular pressure.
- h) Report readings to the Driller.

5. Tool Pusher

- a) Report to the rig floor.
- b) Have a meeting with all of the crews.
- c) Compile and summarize all information.
- d) See that proper well kill procedures are put into action.

6. Operator Representative

- a) Notify Drilling Superintendent
- b) Determine if an emergency exists, and if so, activate the contingency plan.

IGNITION PROCEDURES

Responsibility:

The decision to ignite the well is the responsibility of the DRILLING FOREMAN in concurrence with the STATE POLICE. The State Police shall be the Incident Command on the scene of any major release. Intentional ignition must be coordinated with the NMOCD and local officials. In the event the Drilling Foreman is incapacitated, it becomes the responsibility of the RIG TOOL PUSHER. This decision should be made only as a last resort and in a situation where it is clear that:

1. Human life and property are endangered.
2. There is no hope of controlling the blowout under the prevailing conditions.

If time permits, notify the main office, but do not delay if human life is in danger. Initiate the first phase of the evacuation plan.

Instructions for Igniting the Well:

1. Two people are required for the actual igniting operation. Both men must wear self-contained breathing apparatus and must use a full body harness and attach a retrievable safety line to the D-Ring in the back. One man must monitor the atmosphere for explosive gases with the LEL monitor, while the Drilling Foreman is responsible for igniting the well.
2. The primary method to ignite is a 25mm flare gun with a range of approximately 500 feet.
3. Ignite from upwind and do not approach any closer than is warranted.
4. Select the ignition site best suited for protection and which offers an easy escape route.
5. Before igniting, check for the presence of combustible gases.
6. After igniting, continue emergency actions and procedures as before.
7. All unassigned personnel will limit their actions to those directed by the Drilling Foreman.

NOTE: After the well is ignited, burning Hydrogen Sulfide will convert to Sulfur Dioxide (SO₂), which is also highly toxic. Do not assume the area is safe after the well is ignited.

TRAINING REQUIREMENTS

When working in an area where Hydrogen Sulfide (H₂S) might be encountered, definite training requirements must be carried out. The Company Supervisor will ensure that all personnel at the well site, whether regularly assigned, contracted, or employed on an unscheduled basis, have had adequate training by a qualified instructor in the following:

1. Hazards and Characteristics of Hydrogen Sulfide and Sulfur Dioxide.
2. Physicals effects of Hydrogen Sulfide on the human body.
3. Toxicity of Hydrogen Sulfide and Sulfur Dioxide.
4. H₂S detection, emergency alarm and sensor location.
5. Emergency rescue.
6. First aid and artificial resuscitation.
7. The effects of Hydrogen Sulfide on metals.
8. Location safety.

In addition, Supervisory Personnel will be trained in the following areas:

1. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well as well as blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Contingency Plan and the Public Protection Plan.

Service company personnel and visiting personnel must be notified if the zone contains H₂S, and each service company must provide adequate training and equipment for their employees before they arrive at the well site.

EMERGENCY EQUIPMENT

As stated in the BLM Onshore Order 6, for wells located in a known H₂S areas, H₂S equipment will be rigged up after setting surface casing. For wells located inside known H₂S areas, the flare pit will be located 150' from the location and for wells located outside known H₂S areas, the flare pit will be located 100' away from the location. (See page 6 of Survey plat package and diagram 2.)

It is not anticipated that any H₂S is in the area, however in the event that H₂S is encountered, the attached H₂S Contingency Plan will be implemented. (Please refer to diagram 2 for choke manifold and closed loop system layout.) See H₂S location layout diagram for location of all H₂S equipment on location.

All H₂S safety equipment and systems will be installed, tested and be operational when drilling reaches a depth of 500' above, or three days prior to penetrating a known formation containing H₂S.

Lease Entrance Sign:

Caution signs should be located at all roads providing direct access to the location. Signs shall have a yellow background with black lettering and contain the words "CAUTION" and "POISON GAS" that is legible from a distance of at least 50 feet.

**LEASE NAME
CAUTION – POTENTIAL POISON GAS
HYDROGEN SULFIDE
NO ADMITTANCE WITHOUT AUTHORIZATION**

Windssocks or Wind Streamers:

- A minimum of two 10" windssocks located at strategic locations so that they may be seen from any point on location.
- Wind streamers (if preferred) should be placed at various locations on the well site to ensure wind consciousness at all times. (Corners of location)

Hydrogen Sulfide Detector and Alarms:

- H₂S monitors with alarms will be located on the rig floor, at the cellar, and at the mud pits. These monitors will be set to alarm at 10 PPM with a red light and to alarm at 15 PPM with a red light and audible alarm.

Well Condition Flags:

The Well Condition flags should be located at all roads providing direct access to the location. It should have three (3) color coded flags (green, yellow and red) that will be used to denote the following location conditions:

GREEN – Normal Operating Conditions
YELLOW – Potential Danger
RED – Danger, H₂S Gas Present

Respiratory Equipment:

- Fresh air breathing equipment should be placed at the company supervision trailer and the safe briefing areas and should include the following:
 - A minimum of two SCBA's at each briefing area and the supervisor company supervision trailer.
 - Enough air line units to operate safely, anytime the H₂S concentration reaches the IDLH level (100 PPM).
 - Cascade system with enough breathing air hose and manifolds to reach the rig floor, the derrickman and the other operation areas.

Fire Extinguishers:

Adequate fire extinguishers shall be located at strategic locations.

Mud Program:

The mud program has been designed to minimize the volume of H₂S circulated to the surface. Proper mud weight, safe drilling practices and the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.

Metallurgy:

All drill strings, casing, tubing, wellhead; blowout preventer, drilling spools, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.

Well Control Equipment:

- Flare Line (See diagram 2).
- Choke manifold (See diagram 2). *H₂S Contingency*
- Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing units.
- Auxiliary equipment may include, if applicable, annular preventer & rotating head.

Communication Equipment:

- Proper communication equipment such as cell phones or 2 – way radios should be available for communication between the company man's trailer, rig floor and tool pusher's trailer.

Well Testing:

- There will be no drill stem testing.

Evacuation Plan:

- Evacuation routes should be established prior to spudding the well.
- Should be discussed with all rig personnel.

Designated Areas:

Parking and Visitor area:

- All vehicles are to be parked at a pre-determined safe distance from the wellhead.
- A smoking area will be designated at a pre-determined safe distance from the wellhead and any other possible flammable areas.

Safe Briefing Areas:

- Two Safe Briefing Areas shall be designated on either side of the location at the maximum allowable distance from the well bore so they offset prevailing winds or they are at a 180 degree angle if wind directions tend to shift in the area.

- Personal protective equipment should be stored at both briefing areas or if a moveable cascade trailer is used, it should be kept upwind of existing winds. When wind is from the prevailing direction, both briefing areas should be accessible.

NOTE:

- Additional equipment will be available at Indian Fire and Safety in Hobbs, NM or at Total Safety in Hobbs, NM.

EVACUATION PLAN

General Plan

The direct lines of action to protect the public from hazardous gas situations are as follows:

1. When the company approved supervisor (Drilling Foremen, Tool Pusher or Driller) determine that Hydrogen Sulfide gas cannot be limited to the well location, and the public will be involved, he will activate the evacuation plan. Escape routes are noted on the Area Map.
2. Company safety personnel or designee will notify the appropriate local government agency that a hazardous condition exists and evacuation needs to be implemented.
3. Company approved safety personnel that have been trained in the use of the proper emergency equipment will be utilized.
4. Law enforcement personnel (State Police, Local Police Department, Fire Department, and the Sheriff's Department) will be called to aid in setting up and maintaining road blocks. Also, they will aid in evacuation of the public if necessary.

NOTE: Law enforcement personnel will not be asked to come into a contaminated area. Their assistance will be limited to uncontaminated areas. Constant radio contact will be maintained with them.

5. After the discharge of gas has been controlled, Company approved safety personnel will determine when the area is safe for re-entry.

See Emergency Action Plan

Contacting Authorities

BOPCO L.P. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. (Operator Name)'s response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

H₂S CONTINGENCY PLAN EMERGENCY CONTACTS

BOPCO L.P. Midland Office

432-683-2277

Key Personnel

<u>Name</u>	<u>Title</u>	<u>Cell Phone Number</u>
Stephen Martinez	Drilling Supt.	432-556-0262
Martyn Robertson	Engineer	432-894-4765
Chris Giese	Engineer	432-661-7328
Stephen Ordoyne	Engineer	985-665-7249
Charles Warne	Engineer	432-312-4431

Artesia

Ambulance		911
State Police		575-746-2703
City Police		575-746-2703
Sheriff's Office		575-746-9888
Fire Department		575-746-2701
Local Emergency Planning Committee		575-746-2122
New Mexico Oil Conservation Division		575-748-1283

Carlsbad

Ambulance		911
State Police		575-885-3137
City Police		575-885-2111
Sheriff's Office		575-887-7551
Fire Department		575-887-3798
Local Emergency Planning Committee		575-887-6544
US Bureau of Land Management		575-887-6544

New Mexico Emergency Response Commission (Santa Fe)		505-476-9600
24 Hour		505-827-9126
New Mexico State Emergency Operations Center		505-476-9635
National Emergency Response Center (Washington, DC)		800-424-8802

Other

Wild Well Control		432-550-6202 (Permian Basin)
Cudd PressureControl		432-580-3544 or 432-570-5300 (Permian Basin)
Flight For Life – 4000 24 th St. Lubbock, Texas		806-743-9911
Aerocare – R3, Box 49F, Lubbock, Texas		806-747-8923
Med Flight Air Amb – 2301 Yale Blvd SE #D3, Albuquerque, NM		505-842-4433
S B Air Med Service – 2505 Clark Carr Loop SE, Albuquerque, NM		505-842-4949
Indian Fire and Safety – 3317 NW Cnty Rd, Hobbs, NM		575-393-3093
Total Safety – 3229 Industrial Dr., Hobbs, NM		575-392-2973

TOXIC EFFECTS OF HYDROGEN SULFIDE

Hydrogen Sulfide is extremely toxic. The acceptable ceiling concentration for eight-hour exposure is 10 PPM, which is .001% by volume. Hydrogen Sulfide is heavier than air (specific gravity = 1.192) and colorless. It forms an explosive mixture with air between 4.3 and 46.0 percent by volume. Hydrogen sulfide is almost as toxic as hydrogen cyanide and is between five and six times more toxic than carbon monoxide. Toxicity data for hydrogen sulfide and various other gases are compared in Table I. Physical effects at various Hydrogen Sulfide exposure levels are shown in Table II.

Table I - TOXICITY OF VARIOUS GASES

Common Name	Chemical Formula	Specific Gravity (SC=1)	Threshold Limit (1)	Hazardous Limit (2)	Lethal Concentration (3)
Hydrogen Cyanide	HCN	0.94	10 PPM	150 PPM/HR	300 PPM
Hydrogen Sulfide	H ₂ S	1.18	10 PPM	250 PPM/HR	600 PPM
Sulfur Dioxide	SO ₂	2.21	5 PPM	--	1000 PPM
Chlorine	CL ₂	2.45	1 PPM	4 PPM/HR	1000 PPM
Carbon Monoxide	CO	0.97	50 PPM	400 PPM/HR	1000 PPM
Carbon Dioxide	CO ₂	1.52	5000 PPM	5%	10%
Methane	CH ₄	0.55	90,000 PPM	Combustible in air	Above 5%

- 1) **Threshold Limit** – Concentration at which it is believed that all worker may be repeatedly exposed day after day without adverse effects.
- 2) **Hazardous Limit** – Concentration that will cause death with short-term exposure.
- 3) **Lethal Concentration** – Concentration that will cause death with short-term exposure.

Table II – PHYSICAL EFFECTS OF HYDROGEN SULFIDE

Percent (%)	PPM	Concentration Grains 100 STD. FT3*	Physical Effects
0.001	< 10	00.65	Obvious & unpleasant odor.
0.002	10	01.30	Safe for 8 hours of exposure.
0.010	100	06.48	Kills smell in 3-15 minutes. May sting eyes & throat.
0.020	200	12.96	Kills smell shortly; stings eyes & throat.
0.050	500	32.96	Dizziness; Breathing ceases in a few minutes. Needs prompt artificial respiration.
0.070	700	45.36	Unconscious quickly; Death will result if not rescued promptly.
0.100	1000	64.30	Unconscious at once; Followed by death within minutes.

- **At 15.00 PSIA and 60° F.**

USE OF SELF-CONTAINED BREATHING APPARATUS

1. Anyone who uses an SCBA shall: Be approved by a physician or licensed health care practitioner; Pass a fit test; Be trained in donning and doffing, proper use, including how to ensure a proper face seal, conducting an inspection of the SCBA, and conduct proper maintenance.
2. Such items as facial hair (beard or sideburns) and eyeglasses will not allow a proper face mask seal.
3. Anyone reasonably expected to wear SCBA's shall have these items removed before entering a toxic atmosphere.
4. A special mask with a mount for prescription glasses must be obtained for anyone who must wear eyeglasses in order to see while using an SCBA.
5. SCBA's should be worn in H₂S concentrations above 10 PPM.

RESCUE & FIRST AID FOR H₂S POISONING

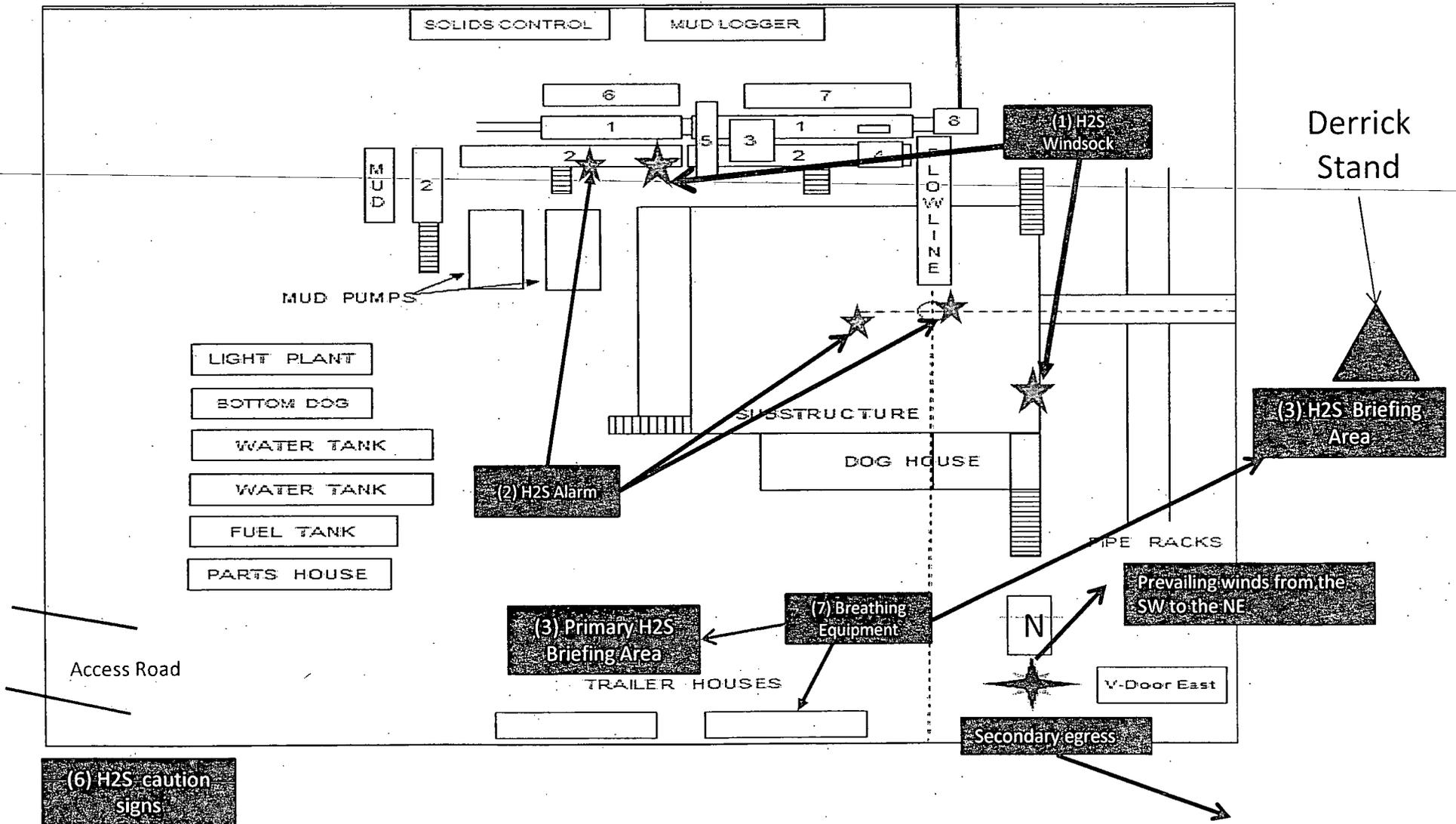
DO NOT PANIC – REMAIN CALM – THINK

1. Hold your breath – do not inhale first.
2. Put on SCBA.
3. Remove victim(s) to fresh air as quickly as possible. Go upwind from source or at right angle to the wind. Do not go downwind.
4. Briefly apply chest pressure – using arm lift method of artificial respiration to clean victim's lungs and to avoid inhaling any toxic gas directly from victim's lungs.
5. Provide artificial respiration if needed.
6. Provide for prompt transportation to the hospital and continue giving artificial respiration if needed.
7. Inform hospital/medical facilities of the possibility of H₂S gas poisoning before they treat.

Besides basic first aid, everyone on location should have a good working knowledge of artificial respiration and CPR, as well as first aid for eyes and skin contact with liquid H₂S.

Proposed H2S Safety Schematic

- 1) Location of windsocks.
- 2) Location of H2S alarms
- 3) Location of briefing areas.
- 4) Terrain of surrounding area (Please refer to page 2 of survey plat package also see point 11 of multi-surface use plan)
- 5) Location of flare line(s) and pit(s) (Please refer to diagram 2 choke manifold diagram and or page six of survey plat packet)
- 6) Location of caution and/or danger signs.
- 7) Location of Breathing Equipment



Location On-Site Notes

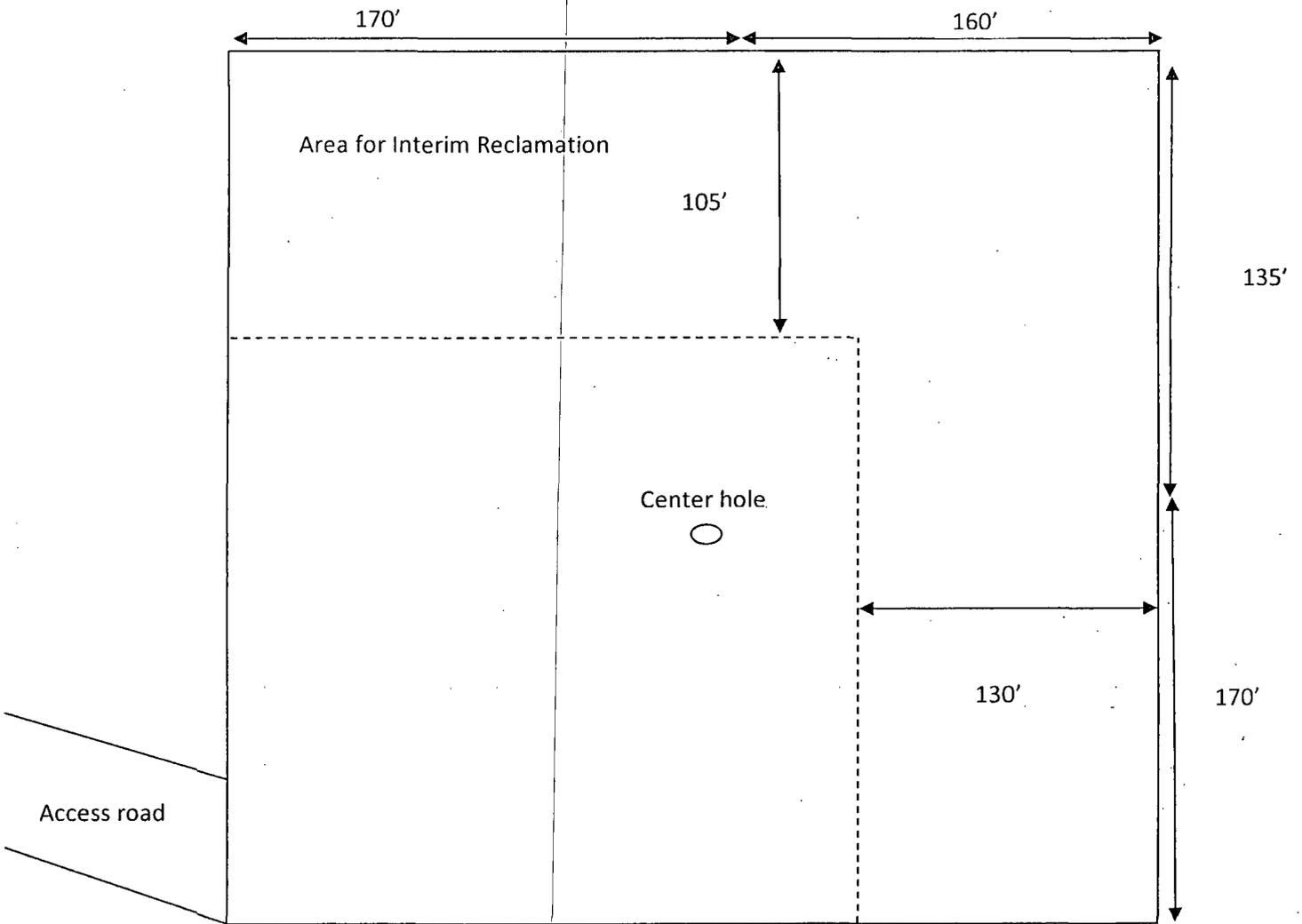
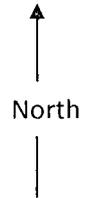
The location onsite was conducted by C. Watkins – BOPCO L.P., R. Rust – BLM, and R. Gomez – Basin Survey on September 22, 2011. The Big Eddy Unit 265H was approved as staked at 1,120' FNL & 1,980' FWL of Sec 34-T19S-R31E. The V-door will be east, with the stock pile of dirt on the east side of the location. The access road will tie in to the southwest corner of the pad.

Diagram 3

BOPCO, Big Eddy Unit 265H

Interim Reclamation Well Pad Layout

V-Door East



PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BOPCO
LEASE NO.:	LC069705
WELL NAME & NO.:	265H Big Eddy Unit
SURFACE HOLE FOOTAGE:	1120' FNL & 1980' FWL
BOTTOM HOLE FOOTAGE:	660' FNL & 1980' FEL, Sec.33
LOCATION:	Section 34, T.19 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.

- General Provisions**
- Permit Expiration**
- Archaeology, Paleontology, and Historical Sites**
- Noxious Weeds**
- Special Requirements**
 - Lesser Prairie-Chicken Timing Stipulations
 - Ground-level Abandoned Well Marker
 - Well signs
 - Commercial well determination
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 - Notification
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