

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

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

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

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

State of New Mexico

Form C-101
Revised July 18, 2013

HOBBES OGD Energy Minerals and Natural Resources

Oil Conservation Division

☐ AMENDED REPORT

FEB 26 2014

1220 South St. Francis Dr.

Santa Fe, NM 87505

RECEIVED

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

¹ Operator Name and Address HARVEY E. YATES P.O. BOX 1933 ROSWELL N.M 88202		² OGRID Number 10179
⁴ Property Code 39629-40385		³ API Number 30-025-41699
⁵ Property Name AIRSTRIP 31 STATE COM		⁶ Well No. 5H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
P	31	18 S	35 E	16	150'	SOUTH	660'	EAST	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
A	31	18 S	35 E	1	330'	NORTH	660'	EAST	LEA

9. Pool Information

Pool Name	Pool Code
AIRSTRIP, BONE SPRING	960

Additional Well Information

¹¹ Work Type NEW DRUG	¹² Well Type OIL	¹³ Cable/Rotary ROTARY	¹⁴ Lease Type STATE P	¹⁵ Ground Level Elevation 3930'
¹⁶ Multiple N	¹⁷ Proposed Depth TVD 10,465' / MD 15,170'	¹⁸ Formation 3 rd BONE SPRING	¹⁹ Contractor	²⁰ Spud Date 12/15/14
Depth to Ground water 60'	Distance from nearest fresh water well		Distance to nearest surface water	

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
SURF	17.5	13.375	54.5#	1900	1600	SURF
INT	12.25	9.625	40#	3860	1100	SURF
PROD	8.75	5.5	17#	15,170	1200	3600

Casing/Cement Program: Additional Comments

Plan to drill 17 1/2" to 1900' uses fresh water, run 13 3/8" 54.5# J-55 csg and cmt back to surf. Drill 12 1/4" hole to 3860' with brine, run 9 5/8" 40# J-55 cgs and cmt back to surf. Drill 8 3/4" curve and lateral with cut brine to MD depth of approx. 15,170. Run 5 1/2" 17# P110 csg, cement back to 3600' in two stage. Set DVtool @ 9950' +/-

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DOUBLE RAM	5000PSI	3000PSI	

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐ if applicable.
Signature: *Keith Cannon*

Printed name: Keith Cannon

Title: Drilling Superintendent

E-mail Address: kcannon@heycoenergy.com

Date: 2/20/14

Phone: 575-623-6601

OIL CONSERVATION DIVISION

Approved By:

Title:

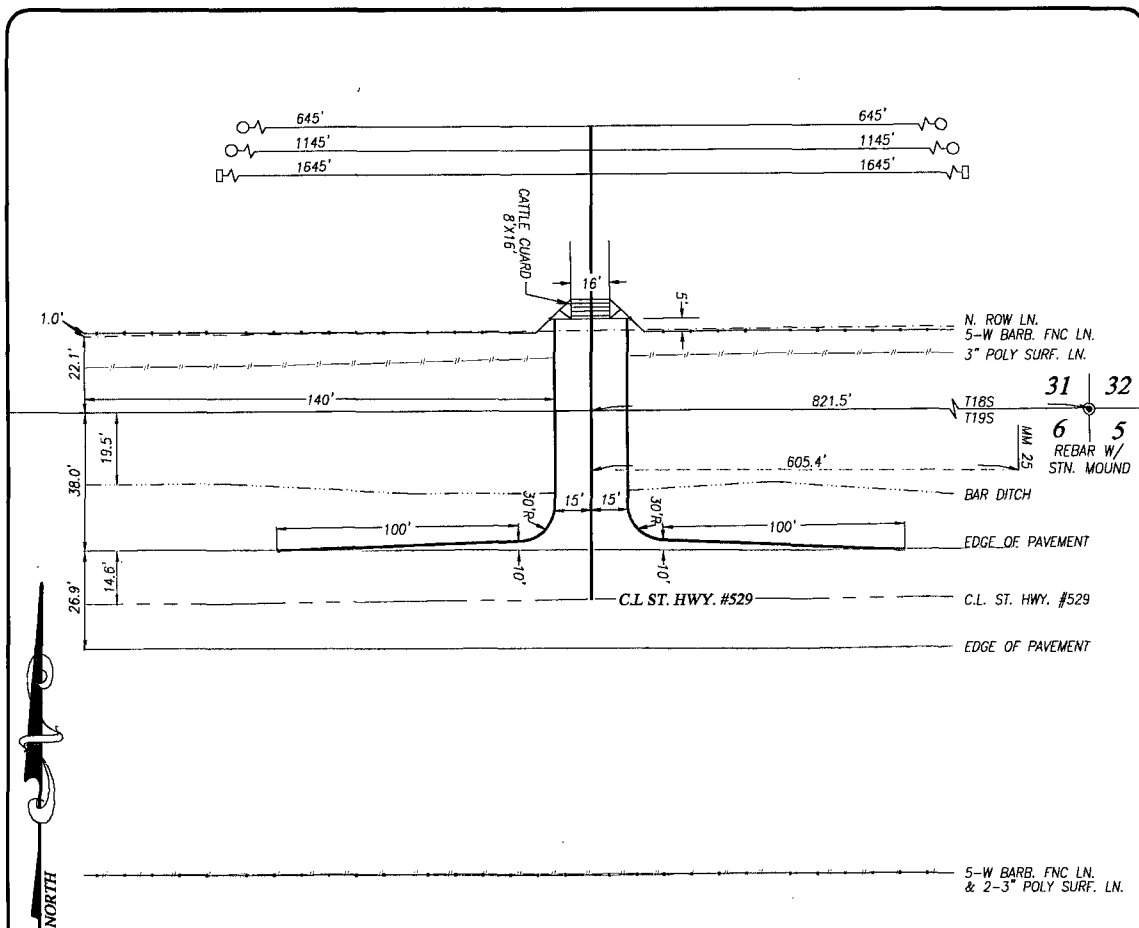
Petroleum Engineer

Approved Date: 02/28/14

Expiration Date: 02/28/16

Conditions of Approval Attached

MAR 03 2014



LEGEND

● DENOTES FOUND CORNER AS NOTED

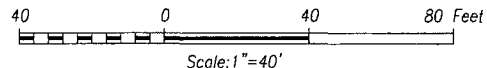
LEGEND

NOTE: Warning Signs Will Be Placed
1500 Feet In Both Directions
During Construction.

NOTE: □ = Shoulder Work Ahead
○ = Be Prepared To Stop
○ = Flagman Ahead

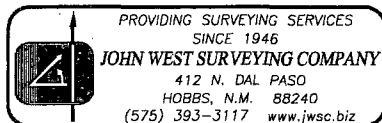
"SHOULDER WORK AHEAD and BE
PREPARED TO STOP" signs shall remain in
place from the time construction starts
until it is completed.

"FLAGMAN AHEAD" signs will be in place
during the hours construction men and
equipment are working. A flagman will be
on duty all the time that construction
men and/or equipment are working.
Signs will be 48"x48" in size. Color
will be black on orange and will meet
the reflective quality specified in the
New Mexico State Highway &
Transportation Standard Specifications.



HARVEY E. YATES

A PROPOSED ROAD TURN OUT
ON ST. HIGHWAY #529
LOCATED IN SECTION 31,
TOWNSHIP 18 SOUTH, RANGE 35 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO



Survey Date: 12/16/13	CAD Date: 1/6/13	Drawn By: ACK
W.O. No.: 13111422	Rev: .	Rel. W.O.: Sheet 1 of 1

FEB 26 2014

HEYCO

COUNTY: Lea
STATE: NM
FORMATION: Bone Spring 3rd Sd
MAXIMUM ROB: 10 DEGR100 FT
FORMATION DIP: 1 DEGREES
DIRECTION: 150 AZIMUTH
DECLINATION: N9E DEGREES
STARTING PT: 0.001 DEGREES
AT 1850 FEET

DATE
1/19/14

FOR GRAPHING

RECEIVED

TARGET DEPTH: 10465 FT TVD @TD
TARGET ANGLE: 0.01 DEGREES
PLANNED HZ LENGTH: 4800 FT
PLANNED KOP: 0 FT TVD

BEGINNING SURVEY

COMPANY: 0 SURVEY TYPE: 0

	DEPTH		FROM TO		0 FT 0 FT	
	MD (Ft)	INCL (deg)	AZIMUTH (deg)	TVD (Ft)	COORDINATES (N+Y-S) (E+W-L)	VERT.SEC (Ft)
TIE IN POINT	3850.00	0.20	150.00	3850.00	-0.01	0.01

MEASURED	INCL	HOLE	COURSE		TOTAL	COORDINATES	CLOSURE	DOGLEG	BUILD
DEPTH	ANGLE	AZIMUTH	LENGTH	T.V.D.	VERT.SEC	(N+S/-)	(E+W/-)	SEVERITY	RATE
(ft)	(degrees)	(degrees)	(ft)	(ft)	(ft)	(ft)	(ft)	(deg/100)	(deg/100)
4000.0	0.25	120.0	150.0	4000.0	-0.4	-0.4	0.4	0.6	0.0
4500.0	0.30	110.0	500.0	4500.0	-1.4	-1.4	2.6	3.0	0.0
5000.0	0.35	100.0	500.0	5000.0	-2.2	-2.2	5.3	5.8	0.0
5500.0	0.40	90.0	500.0	5500.0	-2.5	-2.5	8.6	8.9	0.0
6000.0	0.45	80.0	500.0	6000.0	-2.1	-2.1	12.3	12.5	0.0
6500.0	0.50	70.0	500.0	6499.9	-1.1	-1.1	16.3	16.3	0.0
7000.0	0.55	60.0	500.0	6999.9	0.9	0.9	20.4	20.4	0.0
7500.0	0.60	50.0	500.0	7499.9	3.8	3.7	24.5	24.8	0.0
8000.0	0.65	40.0	500.0	7999.9	7.6	7.6	28.4	29.4	0.0
8500.0	0.70	30.0	500.0	8499.8	12.4	12.4	31.8	34.1	0.0
9000.0	0.75	20.0	500.0	8999.8	18.2	18.1	34.4	38.9	0.0
9500.0	0.80	10.0	500.0	9499.7	24.7	24.7	36.2	43.8	0.0
10000.0	0.85	4.0	500.0	9999.7	31.8	31.8	37.0	48.8	0.0
10070.0	0.9	359.5	70.0	10069.7	31.8	31.8	37.0	48.8	0.1
10170.0	10.0	359.5	100.0	10169.1	41.3	41.3	37.0	55.4	9.1
10270.0	20.0	359.5	100.0	10265.6	67.1	67.1	36.7	76.5	10.0
10370.0	30.0	359.5	100.0	10356.1	109.3	109.3	36.4	115.2	10.0

HEYCO

Airstrip 31 State Com #5H

MEASURED DEPTH (ft)	INCL ANGLE (degrees)	HOLE AZIMUTH (degrees)	COURSE LENGTH (ft)	T.V.D. (ft)	TOTAL VERT.SEC (ft)	COORDINATES (N+/-) (ft)	CLOSURE (E+W) (ft)	DOGLEG SEVERITY (deg/100)	BUILD RATE (deg/100)
10470.0	40.0	359.5	100.0	10437.9	166.6	166.6	35.9	170.4	10.0
10570.0	50.0	359.5	100.0	10508.5	237.2	237.2	35.3	239.9	10.0
10670.0	60.0	359.5	100.0	10565.8	319.1	319.1	34.6	320.9	10.0
10770.0	70.0	359.5	100.0	10608.0	409.6	409.6	33.8	411.0	10.0
10870.0	80.0	359.5	100.0	10633.9	506.0	506.0	33.0	507.1	10.0
10970.0	90.0	359.5	100.0	10642.6	605.5	605.5	32.1	606.4	10.0
11000.0	92.5	359.5	30.0	10641.9	635.5	635.5	31.8	636.3	8.2
11500.0	92.5	359.5	500.0	10620.5	1135.0	1135.0	27.5	1135.4	0.0
12000.0	92.5	359.5	500.0	10599.1	1634.6	1634.6	23.2	1634.7	0.0
12500.0	92.5	359.5	500.0	10577.7	2134.1	2134.1	18.9	2134.2	0.0
13000.0	92.5	359.5	500.0	10556.3	2633.6	2633.6	14.6	2633.6	0.0
13500.0	92.5	359.5	500.0	10534.9	3133.1	3133.1	10.3	3133.1	0.0
14000.0	92.5	359.5	500.0	10513.4	3632.6	3632.6	5.9	3632.6	0.0
14500.0	92.5	359.5	500.0	10492.0	4132.2	4132.2	1.6	4132.2	0.0
15000.0	92.5	359.5	500.0	10470.6	4631.7	4631.7	-2.7	4631.7	0.0
15170.0	92.5	359.5	170.0	10463.3	4801.5	4801.5	-4.2	4801.5	0.0

MD	VERT	TVD	ROB	+E/-W	+N/-S
3850	0	-3850	0.0	0.01	-0.01
4000	0	-4000	0.0	0.421778	-0.421778
4500	-1	-4500	0.0	2.593992	-1.4347
5000	-2	-5000	0.0	5.330022	-2.16781
5500	-2	-5500	0.0	8.585902	-2.45267
6000	-2	-6000	0.0	12.27589	-2.12984
6500	-1	-6500	0.0	16.27468	-1.05836
7000	1	-7000	0.0	20.24159	0.875374
7500	4	-7500	0.0	24.52667	3.749779
8000	8	-8000	0.0	28.37837	7.601478
8500	12	-8500	0.0	31.75265	12.42045
9000	18	-9000	0.0	34.42301	18.14707
9500	25	-9500	0.0	36.17117	24.67128
10000	32	-10000	0.0	37.04813	31.81359
10070	32	-10070	0.1	37.04772	31.80007

10170	41	-10169	9.1	36.96575	41.28744
10270	67	-10266	10.0	36.74244	37.13554
10370	109	-10356	10.0	36.37779	109.3422
10470	167	-10438	10.0	35.88289	166.6249
10570	237	-10509	10.0	35.27278	237.2432
10670	319	-10566	10.0	34.56559	319.0515
10770	410	-10608	10.0	33.784	409.5639
10870	506	-10634	10.0	32.95056	506.0303
10970	606	-10643	10.0	32.09102	605.5197
11000	636	-10642	8.2	31.83192	635.5094
11500	1135	-10621	0.0	27.51625	1135.032
12000	1635	-10599	0.0	23.20057	1634.554
12500	2134	-10578	0.0	18.8849	2134.077
13000	2634	-10556	0.0	14.56923	2633.599
13500	3133	-10535	0.0	10.25356	3133.122
14000	3633	-10513	0.0	5.937889	3632.644
14500	4132	-10492	0.0	1.622217	4132.166
15000	4632	-10471	0.0	-2.69345	4631.689

15170	4802	-10463	0.0	-4.16078	4801.527
0	0	0	0.0	0	0
0	0	0	0.0	0	0
0	0	0	0.0	0	0

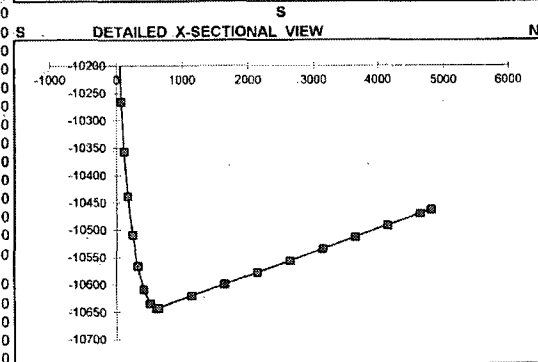
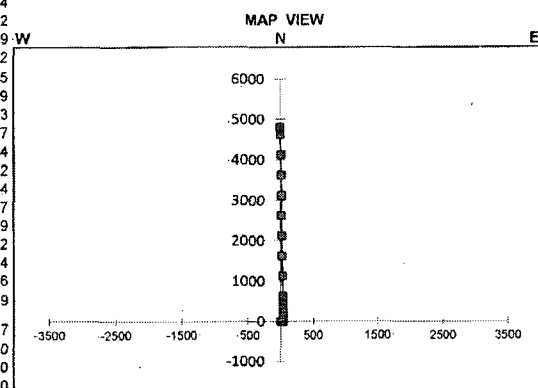
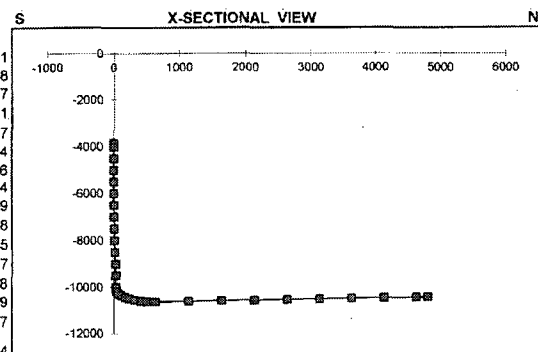
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EXHIBIT "D" LOCATION DIAGRAM

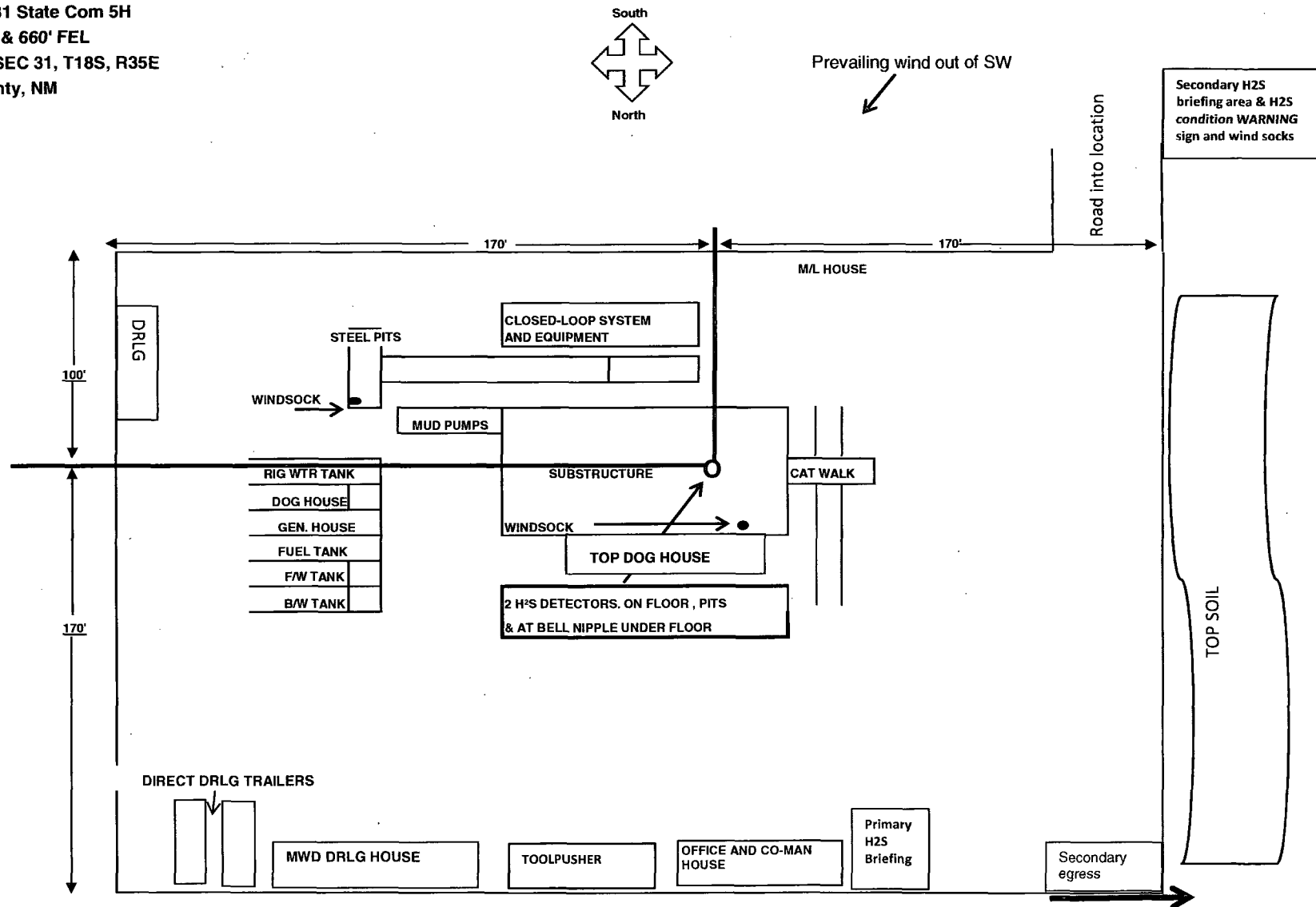
Harvey E. Yates

Airstrip 31 State Com 5H

150' FSL & 660' FEL

UNIT P, SEC 31, T18S, R35E

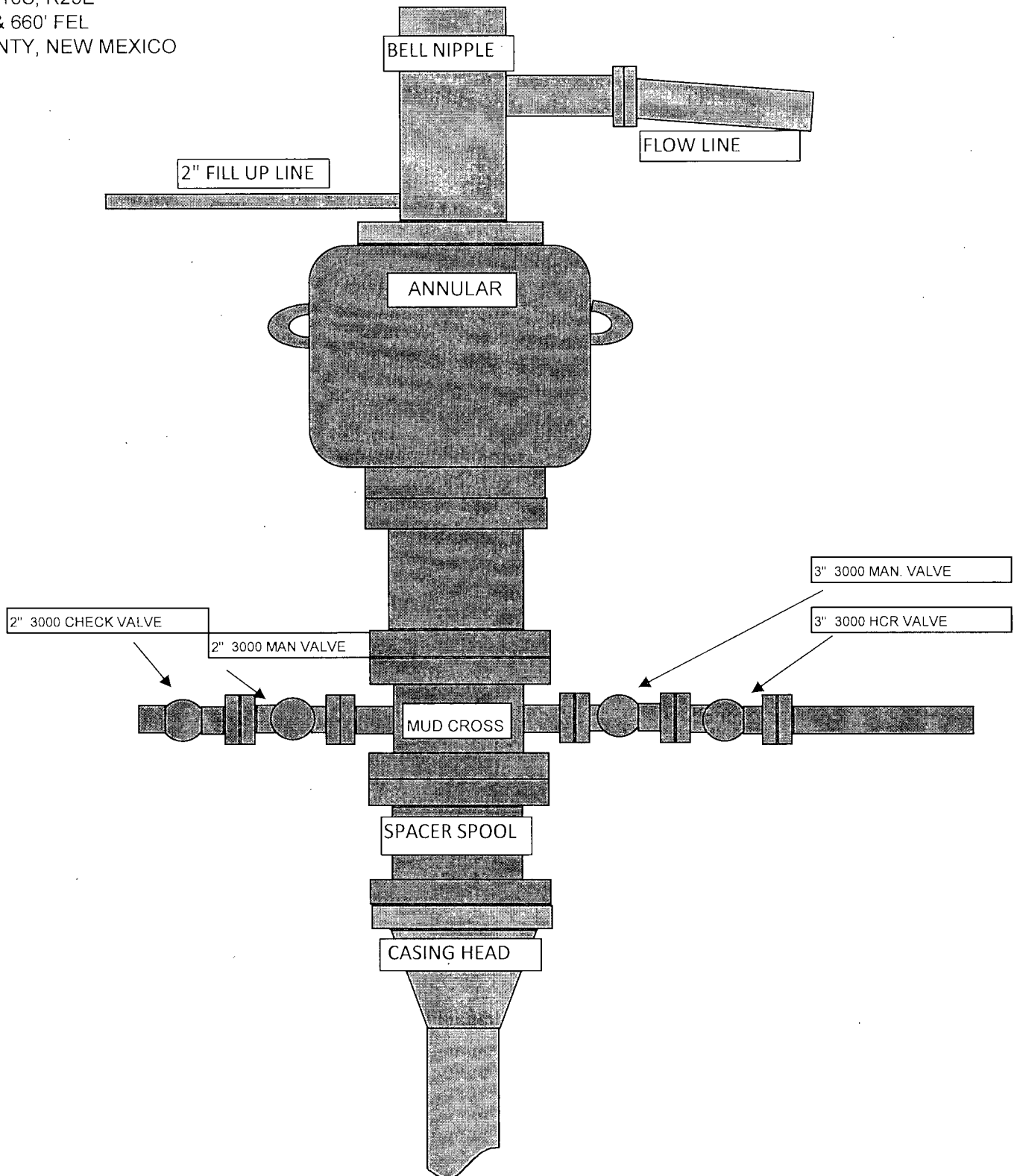
Lea County, NM



2M BOP SYSTEM

HARVEY E. YATES

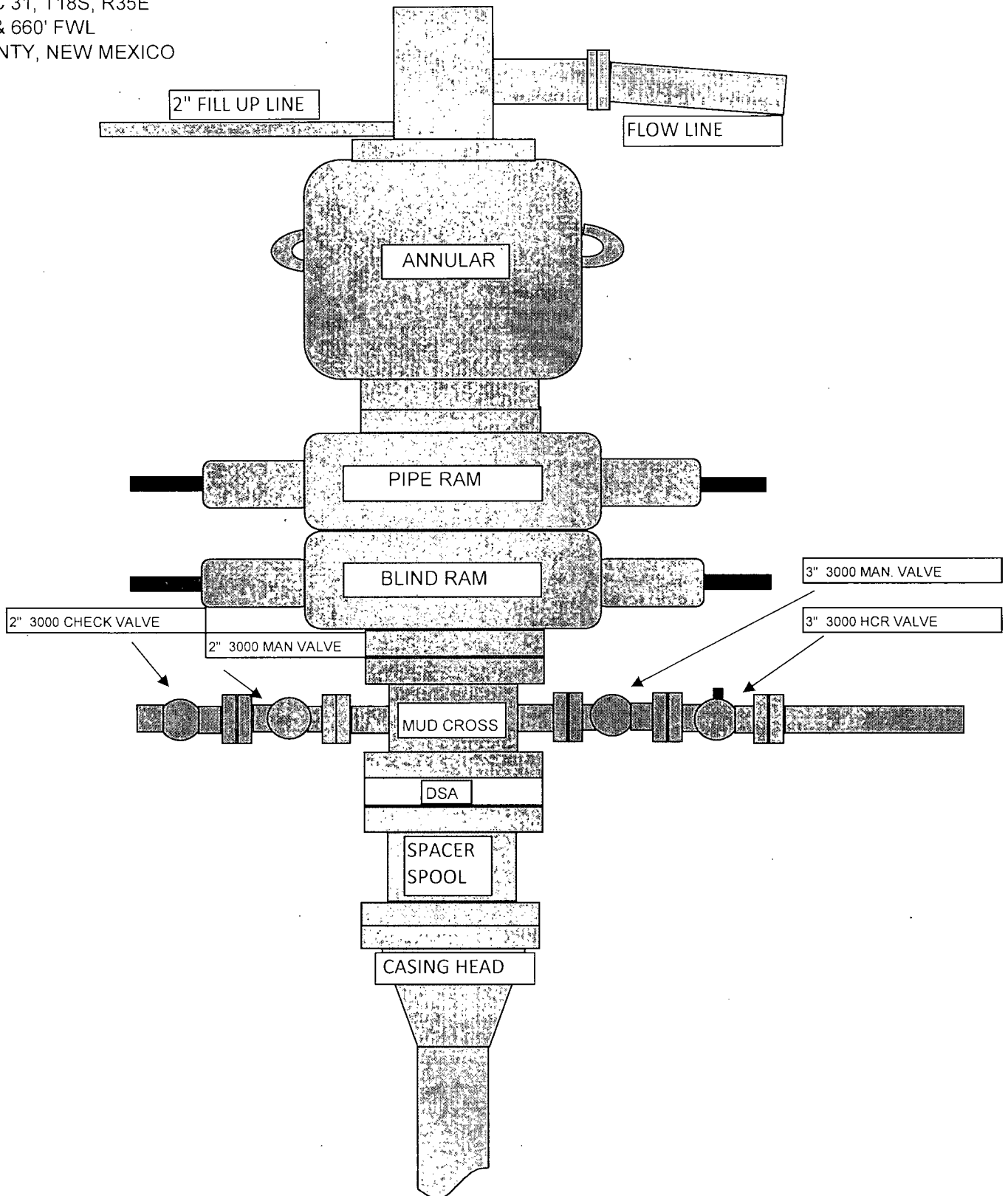
AIRSTrip 31 STATE 5H
SEC 31, T18S, R25E
150' FSL & 660' FEL
LEA COUNTY, NEW MEXICO



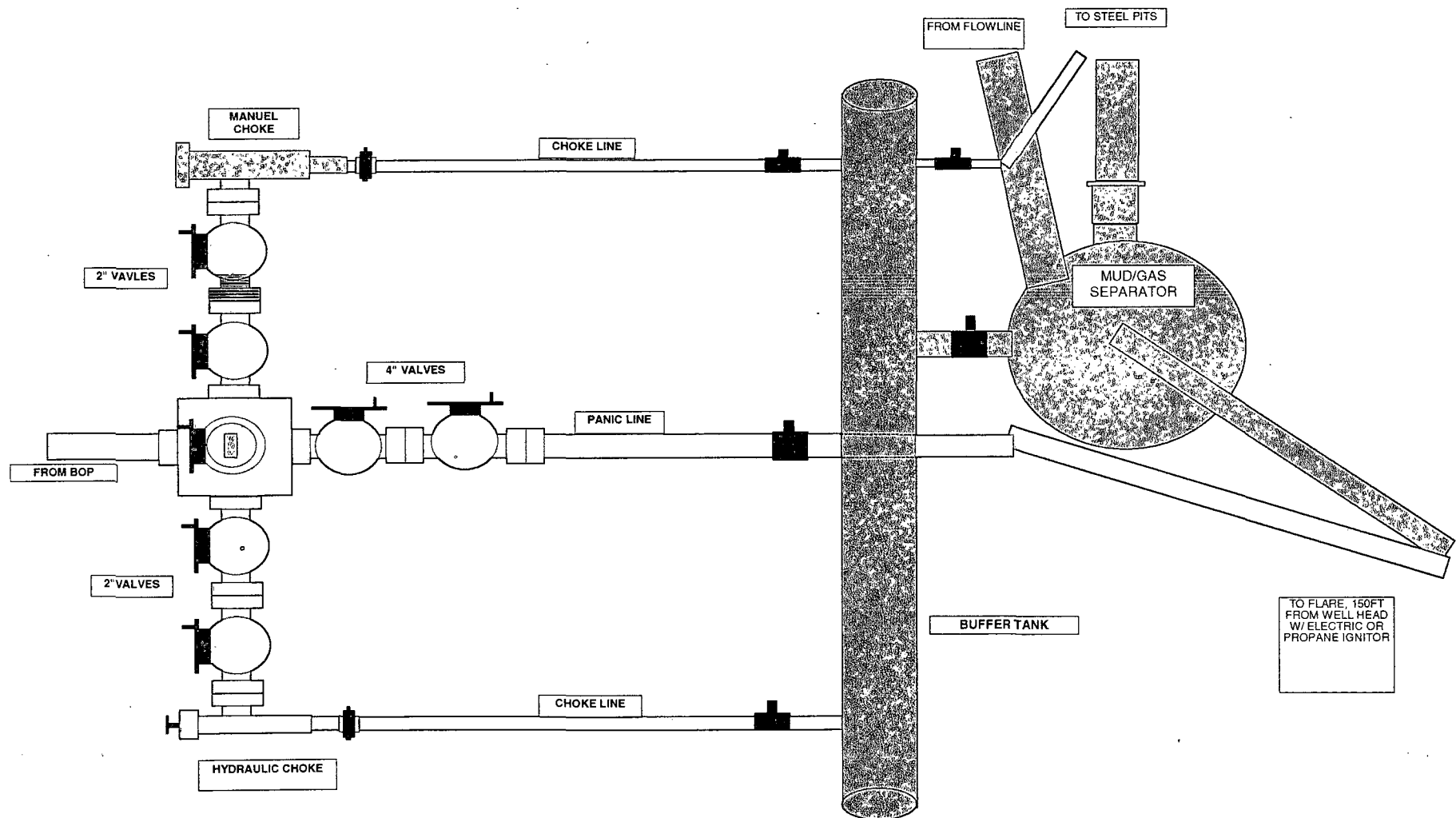
3M BOP SYSTEM

HARVEY E. YATES

AIR STRIP 31 STATE 5H
UL-P, SEC 31, T18S, R35E
150' FSL & 660' FWL
LEA COUNTY, NEW MEXICO



AIRSTrip 31 STATE COM #5H
3000 psi BOP Manifold System



HARVEY E. YATES
P.O. BOX 1933
ROSWELL N.M. 88202
(575) 623-6601 (Office)
(575) 624-5321 (Fax)

HOBBS OCD

FEB 26 2014

RECEIVED

2/20/2014

Mr. Paul Kautz
District 1 Geologist
New Mexico Oil and Gas Division
1625 N. French Drive
Hobbs N.M 88240

**Re: AIRSTRIP 31 STATE COM 5H
150' FSL & 660' FEL
Unit Letter P, Sec. 31, T18S, R35E
LEA, NM
Rule 118 H2S Exposure**

Dear MR Kautz

Harvey E. Yates, have evaluated this well and we do not expect to encounter hydrogen sulfide. However, we will employ a third party monitoring system. We will begin monitoring prior to drilling out the intermediate casing and will continue monitoring the remainder of the well.

Please contact me if you have any additional questions.

Sincerely,

Keith Cannon
Drilling Superintendent