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District II
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Phone: (575) 748-1283 Fax: (575) 748-9745

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

Energy Minerals and Natural Resources

Oil Conservation Division

☐ AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505

HOBBS OCD
MAR 19 2014
RECEIVED

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

¹ Operator Name and Address Fasken Oil and Ranch, Ltd. 6101 Holiday Hill Road, Midland, TX 79707		² OGRID Number 151416
⁴ Property Code 32342		³ API Number 30-025-41771
⁵ Property Name Laguna "16" State		⁶ Well No. 5H

⁷ Surface Location POTASH AREA									
UL - Lot M	Section 16	Township 20S	Range 32E	Lot Idn	Feet from 330	N/S Line South	Feet From 330	E/W Line West	County Lea

⁸ Proposed Bottom Hole Location									
UL - Lot D	Section 16	Township 20S	Range 32E	Lot Idn	Feet from 330	N/S Line North	Feet From 330	E/W Line West	County Lea

⁹ Pool Information	
Pool Name Salt Lake; Bone Spring	Pool Code 53560

Additional Well Information

¹¹ Work Type N	¹² Well Type SO	¹³ Cable/Rotary R	¹⁴ Lease Type S	¹⁵ Ground Level Elevation 3513.3' GR
¹⁶ Multiple No	¹⁷ Proposed Depth 14,215' MD; 12,000' TVD	¹⁸ Formation Bone Spring	¹⁹ Contractor TBD	²⁰ Spud Date 5-1-2014
Depth to Ground water		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
Surface	26"	20"	133	1050'	1550 C	Surface
Salt Protect	17 1/2"	13 3/8"	54.5 & 61	2600'	1350 LW C & 400 C	Surface
Intermediate	12 1/4"	9 5/8"	40	4600' / DV Tool @ 3000'	950 Light C & 450 C	Surface

Casing/Cement Program: Additional Comments

Production Csg. - 8 3/4" hole size, 5 1/2" csg., 17 #, 14,215', cemented w/ 1100 sx LW & 1350 sx LTS, TOC @ Surface.
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²² Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular / Doublaram	5000 / 5000	2500 / 5000	Schaffer / Schaffer

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: <i>Kim Tyson</i>		OIL CONSERVATION DIVISION	
Printed name: Kim Tyson		Approved By: <i>[Signature]</i>	
Title: Regulatory Analyst		Title: Petroleum Engineer	
E-mail Address: kimt@forl.com		Approved Date: 04/09/14 Expiration Date: 04/09/16	
Date: 3-14-2014	Phone: 432-687-1777	Conditions of Approval Attached	

APR 14 2014

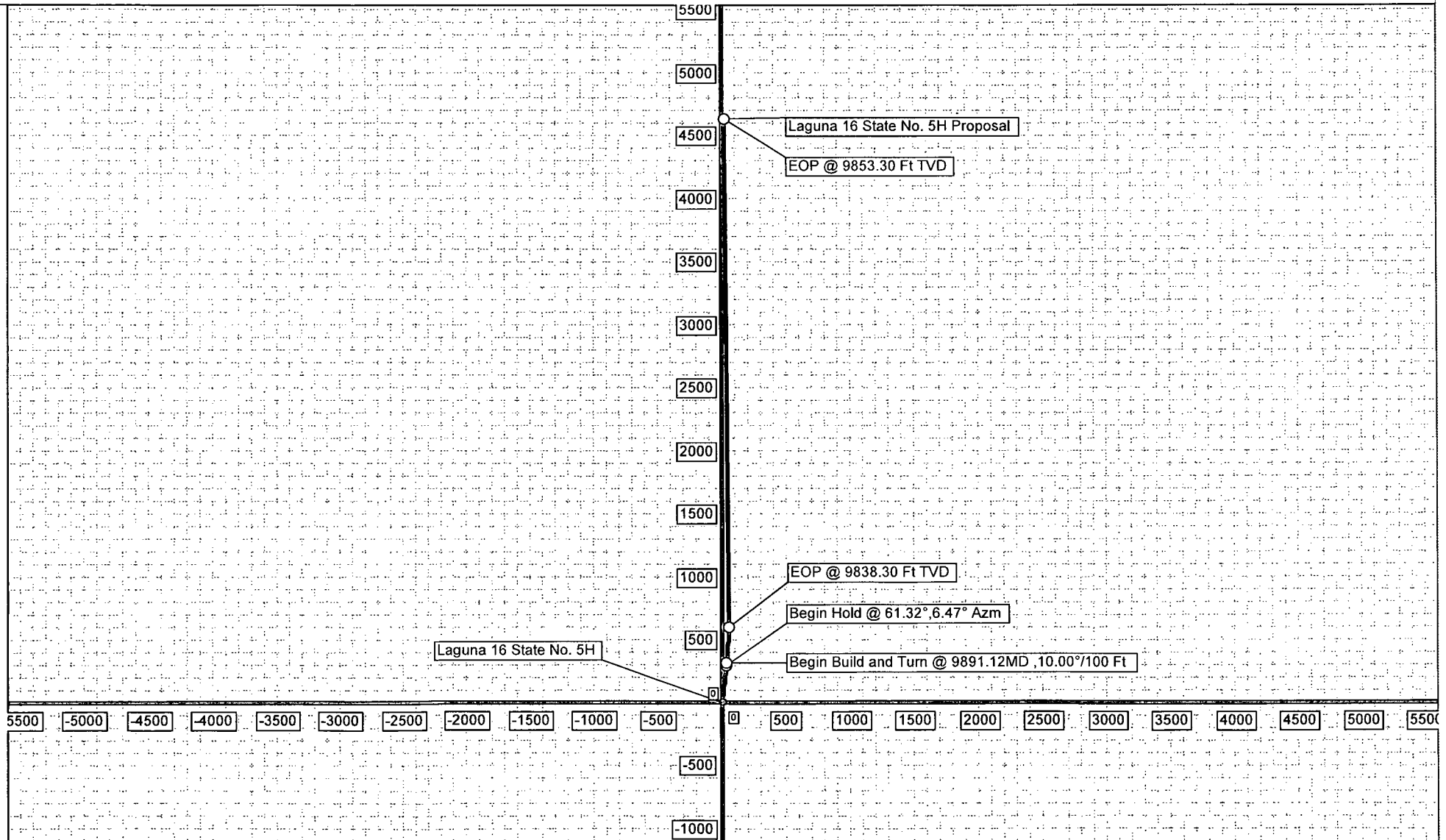
Fasken Oil and Ranch, Ltd.
Laguna "16" State No. 5H
Additional Remarks

This well will have a pilot hole drilled to a depth of 12,000 ' TVD. Then the well will be plugged back to 8800' where it will be completed as a Bone Springs horizontal. Please find attached the Cooperative Development Agreement between Fasken Oil and Ranch, Ltd., Intrepid, and Mosiac concerning the drilling and completeing of wells in this section.

Job Number: Laguna 5H
Company: Fasken Oil and Ranch
Lease/Well: Laguna 16 State No. 5H
Location: Southeast New Mexico
Rig Name: Nomac 54
State/County: New Mexico/ Lea
Country: USA
API Number:

Elevation (To MSL): 3513.30 ft
RKB: 25.00 ft
Projection System: US State Plane 1927 (Exact solution)
Projection Group: New Mexico East 3001
Projection Datum: CLARKE 1866
Magnetic Declination: 7.37
Grid Convergence: 0.29879 E
Date: Friday, March 07, 2014

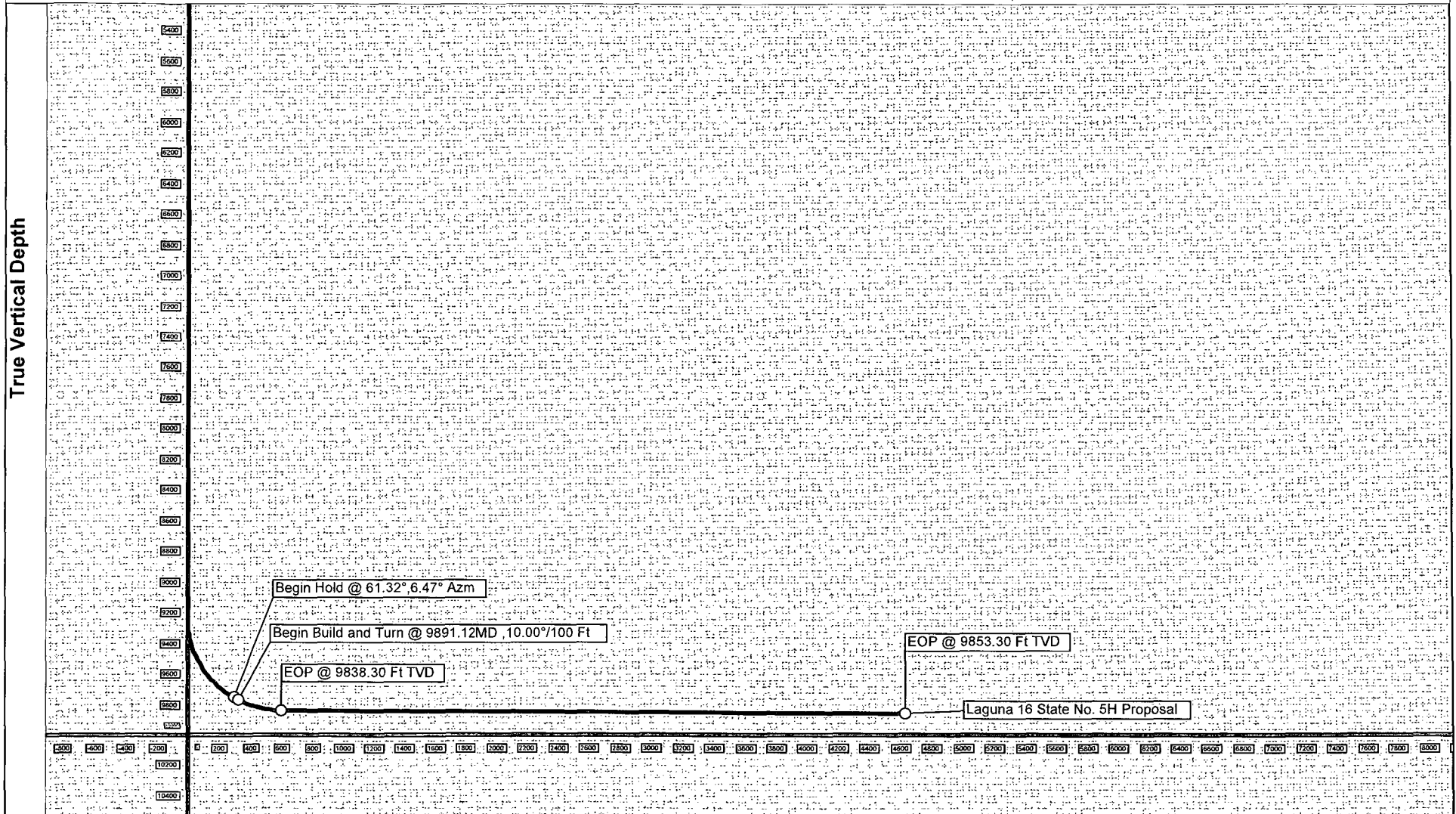
South - North



West - East

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Date: Friday, March 07, 2014



Vertical Section (200 Ft/Div) VSP: 0.00°

Performance Drilling Technology, Inc. - HawkEye™ ©2014

Job Number:	Laguna 5H	Elevation GL:	3513.30 ft	RKB:	25.00 ft
Company:	Fasken Oil and Ranch	Projection System:	US State Plane 1927 (Exact solution)		
Lease/Well:	Laguna 16 State No. 5H	Projection Group:	New Mexico East 3001		
Location:	Southeast New Mexico	Projection Datum:	CLARKE 1866		
Rig Name:	Normac 54	Mag. Declination:	7.37° (C:\HawkEye\IGRF2005.MIF)		
State/County:	New Mexico/ Lea	Grid Convergence:	0.30225 E		
Country:	USA	Date:	Friday, March 07, 2014		

Calculated by HawkEye Software
Minimum Curvature Method
Vertical Section Plane 0.00°
Northing (US ft): 570346.90 Easting (US ft): 671000.60
Latitude: 32°34'0.3541" N Longitude: -103°46'41.7769" W
Well Location: 323.82 FSL, 333.82 FWL, Section 16, T20S, R32E, New Mexico Principal Meridian, Lea County, NM
Direction Reference: Grid North

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	EW (Ft)	NS (Ft)	VS (Ft)	Closure (Ft)	Walk Rate */100 Ft	Build Rate */100 Ft	DLS */100 Ft
0.00	0.00	0.00	0.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
500.00	0.00	0.00	500.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
1000.00	0.00	0.00	1000.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
1500.00	0.00	0.00	1500.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
2000.00	0.00	0.00	2000.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
2500.00	0.00	0.00	2500.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
3000.00	0.00	0.00	3000.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
3500.00	0.00	0.00	3500.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
4000.00	0.00	0.00	4000.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
4500.00	0.00	0.00	4500.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
5000.00	0.00	0.00	5000.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
5500.00	0.00	0.00	5500.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
6000.00	0.00	0.00	6000.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
6500.00	0.00	0.00	6500.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
7000.00	0.00	0.00	7000.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
7500.00	0.00	0.00	7500.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
8000.00	0.00	0.00	8000.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
8500.00	0.00	0.00	8500.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
9000.00	0.00	0.00	9000.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
9250.00	0.00	0.00	9250.00	-1977.80	-392.10	-392.10	2016.29	0.00	0.00	0.00
9350.00	10.00	6.47	9349.49	-1976.82	-383.45	-383.45	2013.67	6.47	10.00	10.00
9450.00	20.00	6.47	9445.96	-1973.91	-357.77	-357.77	2006.07	0.00	10.00	10.00
9550.00	30.00	6.47	9536.48	-1969.15	-315.83	-315.83	1994.32	0.00	10.00	10.00
9650.00	40.00	6.47	9618.29	-1962.70	-258.91	-258.91	1979.70	0.00	10.00	10.00
9750.00	50.00	6.47	9688.91	-1954.74	-188.74	-188.74	1963.83	0.00	10.00	10.00
9850.00	60.00	6.47	9746.20	-1945.52	-107.44	-107.44	1948.49	0.00	10.00	10.00
9863.18	61.32	6.47	9752.65	-1944.23	-96.03	-96.03	1946.60	0.00	10.00	10.00
9891.12	61.32	6.47	9766.06	-1941.47	-71.68	-71.68	1942.79	0.00	0.00	0.00
9991.12	71.04	3.88	9806.41	-1933.30	19.32	19.32	1933.40	-2.59	9.72	10.00
10091.12	80.78	1.59	9830.73	-1928.72	116.08	116.08	1932.21	-2.30	9.75	10.00
10183.36	89.79	359.58	9838.30	-1927.80	207.90	207.90	1938.98	-2.17	9.76	10.00
10683.36	89.79	359.58	9840.15	-1931.46	707.88	707.88	2057.10	0.00	0.00	0.00
11183.36	89.79	359.58	9842.01	-1935.12	1207.87	1207.87	2281.15	0.00	0.00	0.00
11683.36	89.79	359.58	9843.87	-1938.78	1707.85	1707.85	2583.72	0.00	0.00	0.00
12183.36	89.79	359.58	9845.73	-1942.44	2207.83	2207.83	2940.68	0.00	0.00	0.00
12683.36	89.79	359.58	9847.59	-1946.10	2707.82	2707.82	3334.60	0.00	0.00	0.00
13183.36	89.79	359.58	9849.45	-1949.76	3207.80	3207.80	3753.87	0.00	0.00	0.00
13683.36	89.79	359.58	9851.31	-1953.42	3707.78	3707.78	4190.88	0.00	0.00	0.00
14183.36	89.79	359.58	9853.17	-1957.08	4207.77	4207.77	4640.63	0.00	0.00	0.00
14213.60	89.79	359.58	9853.29	-1957.30	4238.00	4238.00	4668.16	0.00	0.00	0.00

- ① 4" Series 900 Valves
- ② Series 900 Annular preventur
- ③ Series 900 Ram type preventur
- ④ 2" Series 900 Check Valve
- ⑤ 2" Series 900 Choke
- ⑥ 2" Series 900 Valves
- ⑦ 3" Series 900 Valves

