

HOBBS OCD

JUN 18 2014

OCD Hobbs

14-510

Form 3160-3
(March 2012)UNORTHODOX
LOCATION

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

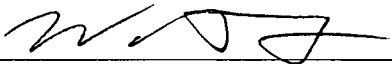
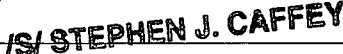
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1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM106916
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Regeneration Energy Corp. <280240>		7. If Unit or CA Agreement, Name and No.
3a. Address PO Box 210 Artesia, NM 88211-0210	3b. Phone No. (include area code) (575)736-3535	8. Lease Name and Well No. E. Livingston Federal #6H <313373>
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 190' FSL 330' FWL Unit letter Lot 4 SHL At proposed prod. zone 330' FNL 350' FWL Lot 1 BHL		9. API Well No. 30-025-41926
14. Distance in miles and direction from nearest town or post office* 30 miles from Carlsbad		10. Field and Pool, or Exploratory SAND DUNE Bone Spring <53800>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 180'	16. No. of acres in lease 660.720	11. Sec., T. R. M. or Blk. and Survey or Area Sec. 31 T22S R32E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. About 150'	19. Proposed Depth MD:14841.1' TVD:10300'	12. County or Parish Lea County
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3490' GL	22. Approximate date work will start* 04/01/2014	13. State NM
23. Estimated duration 29 days		

24. Attachments

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

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

25. Signature 	Name (Printed/Typed) William Miller	Date 01/17/2014
Title Landman		
Approved by (Signature) 	Name (Printed/Typed) STEPHEN J. CAFFEY	Date JUN 12 2014
Title FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

Carlsbad Controlled Water Basin

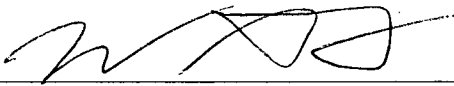
SEE ATTACHED FOR
CONDITIONS OF APPROVALApproval Subject to General Requirements
& Special Stipulations Attached

JUN 19 2014 PM

Surface Use Plan
Regeneration Energy Corp.
E. Livingston Federal 31 #6H
SHL: 190' FSL & 330' FWL UL M
Section 31, T22S, R32E
BHL: 330' FNL & 350' FWL UL D
Section 31, T22S, R32E
Lea County, New Mexico

OPERATOR CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this 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 Regeneration Energy Corp., 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 27th day of January, 2014.

Signed: 

Printed Name: William Miller
Position: Landman
Address: PO Box 210, Artesia, NM 88210
Telephone: (575) 736-3535
Field Representative (if not above signatory):
E-mail: wmiller@pvt.net

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Regeneration Energy Corp.
DRILLING AND OPERATIONS PROGRAM

E. Livingston Federal 31 #6H

SHL: 190' FSL & 330' FWL

BHL: 330' FNL & 350' FWL

Section 31 T22S R32E

Lea County, New Mexico

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In conjunction with Form 3160-3, Application for Permit to Drill subject well, Regeneration Energy Corp. submits the following eleven items of pertinent information in accordance with BLM requirements.

1. Geological surface formation: Permian
2. The estimated tops of geologic markers & estimated depths at which anticipated water, oil or gas formations are expected to be encountered are as follows:

Fresh Water	~ 350'	
Rustler	725'	
Top of Salt	1170'	
Fletcher Anhydrite	4260'	
Delaware	4500'	Oil
Bone Spring	8410'	Oil
Wolfcamp	11850'	
TD TVD	10,300'	
TD MD	14,841'	

No other formations are expected to give up oil, gas or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13-3/8" casing at 830' ~~775'~~ and circulating cement back to surface. All intervals will be isolated by setting 5 1/2" casing to total depth and tying back cement to a minimum of 500' into 9-5/8" csg shoe.

3. Proposed Casing Program: All casing is new and API approved

See COA

Hole Size	Depths	Section	OD Casing	New/Used	Wt	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17 1/2"	0' - 775' 830'	Surface	13 3/8"	New	54.5#	STC	J-55	3.08	1.66	3.61
12 1/4"	0' - 3500'	Intrmd	9 5/8"	New	36#	BTC	J-55	1.22	1.125	2.43
12 1/4"	3500' - 4400'	Intrmd	9 5/8"	New	40#	BTC	N-80	1.48	1.125	2.43
8 3/4"	0' - 14,841'	Production Curve & Lateral	5 1/2"	New	17#	LTC	P-110	1.53	1.61	1.62

- While running all casing strings, the pipe will be kept a minimum of 1/3 full at all times to avoid approaching the collapse pressure of casing.

4. Proposed Cement Program

- a. 13-3/8" Surface
- Lead: 370 sx Class C + 4% Gel + 2% CaCl₂
(13.5 ppg, 1.75 cuft/sx, 9.2 gal/sx)
- Cmt: 250 sx Class C + 2% CaCl₂
(14.8 ppg, 1.35 cuft/sx, 6.3 gal/sx)
- **Calculated w/50% excess on OH volumes
- b. 9 5/8" Intermediate:
- Lead: 1050 sx 35:65:6 C +Salt+Gilsonite+CFR-3+ HR601
(12.9 ppg, 1.89 cuft/sx, 9.61 gal/sx)
- Tail: 300 sx Class C
(14.8 ppg, 1.35 cuft/sx, 6.3 gal/sx)
- **Calculated w/35% excess on OH volumes
- d. 5 1/2" Production
- Stg. 1 Lead: 450 sx 50:50:10 C +Salt+Gilsonite+CFR-3+ HR601
(12.9 ppg, 1.9 cuft/sx, 9.56 gal/sx)
- Tail: 1050 sx 50:50:2 H +Salt+GasStop +HR601 +CFR-3
(14.4 ppg, 1.22 cuft/sx, 5.44 gal/sx)
- **Calculated w/35% excess on OH volumes
- Stg. 2 Lead: 800 sx 50:50:10 C +Salt+Gilsonite+CFR-3+ HR601
(8.4 ppg, 2.26 cuft/sx, 12.91 gal/sx)
- Tail: 100 sx 50:50:2 H +Salt+GasStop +HR601 +CFR-3
(14.8 ppg, 1.36 cuft/sx, 6.34 gal/sx)
- **Calculated w/35% excess on OH volumes
- See COA

- The above cement volumes could be revised pending the caliper measurements.
- The 13-3/8" surface cement is designed to circulate to surface.
- The 9-5/8" intermediate cement is designed to circulate to surface.
- The production TOC will tie back a minimum 500' into previous shoe.

5. Minimum Specifications for Pressure Control:

A 13 5/8" 2000 psi Hydril type annular preventer with mud cross, choke manifold, chokes, kill line, Kelly cock, safety valve and subs to fit all drill strings in use as provided for in Onshore Order #2 will be nipped up on the 13 3/8" x 2000 psi SOW X 13 5/8" x 2000 psi casing head (see attached BOPE drawings). This unit will be hydraulically operated and will be tested by independent tester using test plug to 250 psig/300 psig low and 1000 psig high. Choke line valve, chokes, upper Kelly cock valve, safety valve shall also be tested to 250 psig/300 psig low and 2000 psig high by independent tester.

After setting the 9 5/8" intermediate casing the following BOPE as provided for in Onshore Order #2 will be rigged up on the 9 5/8" intermediate casing spool (13 5/8" 2000 psi x 13 5/8" 3000 psi): 13 5/8" X 3000 psi annular, 13 5/8" X 3000 psi double ram type preventer with blind rams on top and 4 1/2" drill pipe rams on the bottom, choke, mud cross, choke manifold, 4" diameter choke line, 2" kill line, kelly cock, safety valve with proper subs for all drill string connections in use (see attached BOPE drawings).

The BOPE including auxiliary equipment (chokes, choke manifold etc.) will be tested by independent tester.

Test plug will be used and all BOPE tested to 250 psig/ 300 psig low pressure and 3000 psig high pressure for 10 minutes. Annular preventer will be tested to 1500 psig. BOP stack will be used continuously until total depth is reached. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Any time a component of the BOP stack or choke manifold is changed or installed BOPE will be re-tested as required.

All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string depth or 1500 psig, whichever is greater, but not to exceed 70 percent of casing's minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action will be taken. If H₂S is monitored with 100 ppm in the gas stream while drilling intermediate, we will shut in and install a remote operated choke.

6. Estimated BHP & BHT:

4466 psi

152°F

7. Mud Program: The applicable depths and properties of this system are as follows:

See COA

Depth	Type System	Mud Weight	Viscosity (sec)	Waterloss (cc)
0' - 775' 830'	Fresh Water	8.4	29	N.C.
775' - 4400'	Brine	10	29	N.C.
4400' - 14,841'	Cut Brine	8.9 - 9.2	29	N.C.

- The necessary mud products for weight addition and fluid loss control will be on location at all times.
- A visual and electronic mud monitoring system will be rigged up prior to spud to detect changes in the volume of mud system. The electronic system consists of a pit volume totalizer, stroke counter and flow sensor at flow line.
- If weight and/or viscosity are introduced to the mud system a daily mud check will be performed by mud contractor, along with tourly check by rig personnel.
- After setting intermediate casing, a third party gas unit detection system will be installed at the flow line.

8. Auxiliary Well Control and Monitoring Equipment:

- See COA
- a. A Kelly cock will be in the drill string at all times.
 - b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
 - c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

9. Testing, Logging and Coring Program:

- a. Drill stem tests will be based on geological sample shows.
- b. If open hole electrical logging is performed, the program will be:

- i. Total Depth to Intermediate Casing: Dual Laterolog-Micro Laterolog and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
- ii. Total Depth to Surface: Compensated Neutron with Gamma Ray
- iii. No coring program is planned
- iv. Additional testing will be initiated subsequent to setting the 5 1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

10. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H₂S in this area. If H₂S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. No H₂S is anticipated to be encountered.

See
COA

11. Anticipated starting date and Duration of Operations:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as possible after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 30 days.

Surface Casing

Stage 1

Fluid 1: Water Based Spacer

Gel Spacer w/Red Dye

2.50 lbm/bbl FWCA

2.50 lbm/bbl K-35

0.25 lbm/Mgal Rhodamine Red Dye No. 2

Fluid Density: 8.4 lbm/gal

Volume: 20 bbl

Fluid 2: Lead Slurry

EXTENDACEM (TM) SYSTEM

Fluid Weight: 13.5 lbm/gal

Volume: 115.1 bbl

Slurry Yield: 1.746 ft³/sack

Total Mixing Fluid: 9.2 Gal

Top Of Fluid: 0 ft

Calculated Fill: 340 ft

Calculated Sacks: 370 Sacks

Proposed Sacks: 370 Sacks

Fluid 3: Tail Slurry

HALCEM (TM) SYSTEM

2 % Calcium Chloride - Flake

Fluid Weight: 14.8 lbm/gal

Volume: 60 bbl

Slurry Yield: 1.347 ft³/sack

Total Mixing Fluid: 6.39 Gal

Top Of Fluid: 340 ft

Calculated Fill: 435 ft

Calculated Sacks: 250 Sacks

Proposed Sacks: 250 Sacks

Fluid 4: Fresh Water

Displacement

Fluid Density: 8.34 lbm/gal

Volume: 113.6 bbl

Intermediate Casing

Stage 1

Fluid 1: Water Based Spacer

Gel Spacer

2.50 lbm/bbl FWCA

2.50 lbm/bbl K-35

0.25 lbm/Mgal Rhodamine Red Dye No. 2

Fluid Density: 8.4 lbm/gal

Volume: 20 bbl

Fluid 2: Lead Slurry

ECONOCHEM (TM) SYSTEM

5 % Salt

5 lbm Kol-Seal

0.1250 lbm Poly-E-Flake

Fluid Weight: 12.9 lbm/gal

Volume: 351.4 bbl

Slurry Yield: 1.879 ft³/sack

Total Mixing Fluid: 9.61 Gal

Top Of Fluid: 0 ft

Calculated Fill: 3176 ft

Calculated Sacks: 1050 Sacks

Proposed Sacks: 1050 Sacks

Fluid 3: Tail Slurry

HALCEM (TM) SYSTEM

1 % Calcium Chloride - Flake

Fluid Weight: 14.8 lbm/gal

Volume: 71.4 bbl

Slurry Yield: 1.336 ft³/sack

Total Mixing Fluid: 6.36 Gal

Top Of Fluid: 3176 ft

Calculated Fill: 1224 ft

Calculated Sacks: 300 Sacks

Proposed Sacks: 300 Sacks

Fluid 4: Fresh Water

Displacement

Fluid Density: 8.34 lbm/gal

Volume: 337.1 bbl

Production Casing

Stage 1

Fluid 1: Water Based Spacer

Gel Spacer w/Red Dye

2.50 lbm/bbl FWCA

2.50 lbm/bbl K-35

0.25 lbm/Mgal Rhodamine Red Dye No. 2

Fluid Density: 8.4 lbm/gal

Volume: 20 bbl

Fluid 2: Lead Slurry

ECONOCHEM (TM) SYSTEM

3 % Salt

5 lbm Kol-Seal

0.30 % CFR-3

0.1250 lbm Poly-E-Flake

0.20 % HR-601

Fluid Weight: 12.9 lbm/gal

Volume: 149.3 bbl

Slurry Yield: 1.863 ft³/sack

Total Mixing Fluid: 9.56 Gal

Top Of Fluid: 3254 ft

Calculated Fill: 4205 ft

Calculated Sacks: 450 Sacks

Proposed Sacks: 450 Sacks

Fluid 3: Tail Slurry

VERSACHEM (TM) SYSTEM

0.50 % Halad(R)-344

0.40 % CFR-3

Fluid Weight: 14.4 lbm/gal

Volume: 228.7 bbl

Slurry Yield: 1.223 ft³/sack

Total Mixing Fluid: 5.44 Gal

Top Of Fluid: 7459 ft

Calculated Fill: 7382 ft

Calculated Sacks: 1050 Sacks

Proposed Sacks: 1050 Sacks

Fluid 4: Fresh Water

Displacement

Fluid Density: 8.34 lbm/gal

Volume: 344.1 bbl

Multiple Stage Cementer

6500 ft(MD)

Stage 2

Fluid 1: Water Based Spacer

Gel Spacer w/Red Dye

2.50 lbm/bbl FWCA

2.50 lbm/bbl K-35

0.25 lbm/Mgal Rhodamine Red Dye No. 2

Fluid Density: 8.4 lbm/gal

Volume: 20 bbl

Fluid 2: Lead Slurry

VERSACEM (TM) SYSTEM

8 % Bentonite

0.50 lbm D-AIR 5000

0.70 % HR-601

0.1250 lbm Poly-E-Flake

Fluid Weight: 11.9 lbm/gal
Volume: 321.9 bbl
Slurry Yield: 2.259 ft³/sack
Total Mixing Fluid: 12.91 Gal
Top Of Fluid: 0 ft
Calculated Fill: 5735 ft
Calculated Sacks: 800 Sacks
Proposed Sacks: 800 Sacks

Fluid 3: Tail Slurry

HALCEM (TM) SYSTEM

Fluid Weight: 14.8 lbm/gal
Volume: 23.6 bbl
Slurry Yield: 1.326 ft³/sack
Total Mixing Fluid: 6.34 Gal
Top Of Fluid: 5735 ft
Calculated Fill: 765 ft
Calculated Sacks: 100 Sacks
Proposed Sacks: 100 Sacks

Fluid 4: Fresh Water

Displacement

Fluid Density: 8.34 lbm/gal
Volume: 151.1 bbl

Regeneration Energy Corporation

Lea County, NM (NAD1983)

E. Livingston Federal 31

#6H

OH

Plan: Design #1

Standard Planning Report

24 January, 2014

Wellplanning

Planning Report

Database:	EDM-5000.1 Single User Db	Local Co-ordinate Reference:	Well #6H
Company:	Regeneration Energy Corporation	TVD Reference:	WELL @ 3507.0usft (Original Well Elev)
Project:	Lea County, NM (NAD1983)	MD Reference:	WELL @ 3507.0usft (Original Well Elev)
Site:	E. Livingston Federal 31	North Reference:	Grid
Well:	#6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

Project	Lea County, NM (NAD1983)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	E. Livingston Federal 31		
Site Position:		Northing:	488,423.70 usft
From:	Map	Easting:	730,181.80 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 20' 28.558 N
		Longitude:	103° 43' 18.711 W
		Grid Convergence:	0.33 °

Well	#6H		
Well Position	+N/-S	0.0 usft	Northing: 488,423.70 usft
	+E/-W	0.0 usft	Easting: 730,181.80 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level: 3,490.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	1/24/2014	7.34
			Dip Angle
			(°)
			Field Strength
			(nT)
			60.20
			48,409

Design	Design #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			0.00

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
9,822.5	0.00	0.00	9,822.5	0.0	0.0	0.00	0.00	0.00	0.00	
10,572.6	90.00	0.00	10,300.0	477.5	0.0	12.00	12.00	0.00	0.00	
14,841.1	90.00	0.00	10,300.0	4,746.0	0.0	0.00	0.00	0.00	0.00	PBHL(ELivingston #6

Wellplanning

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #6H
Company:	Regeneration Energy Corporation	TVD Reference:	WELL @ 3507.0usft (Original Well Elev)
Project:	Lea County, NM (NAD1983)	MD Reference:	WELL @ 3507.0usft (Original Well Elev)
Site:	E. Livingston Federal 31	North Reference:	Grid
Well:	#6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
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1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00	

Wellplanning

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #6H
Company:	Regeneration Energy Corporation	TVD Reference:	WELL @ 3507.0usft (Original Well Elev)
Project:	Lea County, NM (NAD1983)	MD Reference:	WELL @ 3507.0usft (Original Well Elev)
Site:	E. Livingston Federal 31	North Reference:	Grid:
Well:	#6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00
9,822.5	0.00	0.00	9,822.5	0.0	0.0	0.0	0.00	0.00	0.00
KOP - 9822.5 MD, 0.00° INC, 0.00° AZI									
9,825.0	0.30	0.00	9,825.0	0.0	0.0	0.0	12.00	12.00	0.00
9,850.0	3.30	0.00	9,850.0	0.8	0.0	0.8	12.00	12.00	0.00
9,875.0	6.30	0.00	9,874.9	2.9	0.0	2.9	12.00	12.00	0.00
9,900.0	9.30	0.00	9,899.7	6.3	0.0	6.3	12.00	12.00	0.00
9,925.0	12.30	0.00	9,924.2	11.0	0.0	11.0	12.00	12.00	0.00
9,950.0	15.30	0.00	9,948.5	16.9	0.0	16.9	12.00	12.00	0.00

Wellplanning

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #6H
Company:	Regeneration Energy Corporation	TVD Reference:	WELL @ 3507.0usft (Original Well Elev)
Project:	Lea County, NM (NAD1983)	MD Reference:	WELL @ 3507.0usft (Original Well Elev)
Site:	E. Livingston Federal 31	North Reference:	Grid
Well:	#6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,975.0	18.30	0.00	9,972.4	24.1	0.0	24.1	12.00	12.00	0.00
10,000.0	21.30	0.00	9,995.9	32.6	0.0	32.6	12.00	12.00	0.00
10,025.0	24.30	0.00	10,019.0	42.3	0.0	42.3	12.00	12.00	0.00
10,050.0	27.30	0.00	10,041.5	53.2	0.0	53.2	12.00	12.00	0.00
10,075.0	30.30	0.00	10,063.4	65.2	0.0	65.2	12.00	12.00	0.00
10,100.0	33.30	0.00	10,084.6	78.4	0.0	78.4	12.00	12.00	0.00
10,125.0	36.30	0.00	10,105.2	92.7	0.0	92.7	12.00	12.00	0.00
10,150.0	39.30	0.00	10,124.9	108.0	0.0	108.0	12.00	12.00	0.00
10,175.0	42.30	0.00	10,143.8	124.3	0.0	124.3	12.00	12.00	0.00
10,200.0	45.30	0.00	10,161.9	141.6	0.0	141.6	12.00	12.00	0.00
10,225.0	48.30	0.00	10,179.0	159.8	0.0	159.8	12.00	12.00	0.00
10,250.0	51.30	0.00	10,195.1	178.9	0.0	178.9	12.00	12.00	0.00
10,275.0	54.30	0.00	10,210.3	198.8	0.0	198.8	12.00	12.00	0.00
10,300.0	57.30	0.00	10,224.3	219.5	0.0	219.5	12.00	12.00	0.00
10,325.0	60.30	0.00	10,237.3	240.9	0.0	240.9	12.00	12.00	0.00
10,350.0	63.30	0.00	10,249.1	262.9	0.0	262.9	12.00	12.00	0.00
10,375.0	66.30	0.00	10,259.7	285.5	0.0	285.5	12.00	12.00	0.00
10,400.0	69.29	0.00	10,269.2	308.7	0.0	308.7	12.00	12.00	0.00
10,425.0	72.29	0.00	10,277.4	332.3	0.0	332.3	12.00	12.00	0.00
10,450.0	75.29	0.00	10,284.4	356.3	0.0	356.3	12.00	12.00	0.00
10,475.0	78.29	0.00	10,290.1	380.6	0.0	380.6	12.00	12.00	0.00
10,500.0	81.29	0.00	10,294.5	405.2	0.0	405.2	12.00	12.00	0.00
10,525.0	84.29	0.00	10,297.6	430.0	0.0	430.0	12.00	12.00	0.00
10,550.0	87.29	0.00	10,299.5	455.0	0.0	455.0	12.00	12.00	0.00
10,572.6	90.00	0.00	10,300.0	477.5	0.0	477.5	12.00	12.00	0.00
EOC: 10572.6 MD: 90.00° INC: 0.00° AZI:									
10,600.0	90.00	0.00	10,300.0	504.9	0.0	504.9	0.00	0.00	0.00
10,700.0	90.00	0.00	10,300.0	604.9	0.0	604.9	0.00	0.00	0.00
10,800.0	90.00	0.00	10,300.0	704.9	0.0	704.9	0.00	0.00	0.00
10,900.0	90.00	0.00	10,300.0	804.9	0.0	804.9	0.00	0.00	0.00
11,000.0	90.00	0.00	10,300.0	904.9	0.0	904.9	0.00	0.00	0.00
11,100.0	90.00	0.00	10,300.0	1,004.9	0.0	1,004.9	0.00	0.00	0.00
11,200.0	90.00	0.00	10,300.0	1,104.9	0.0	1,104.9	0.00	0.00	0.00
11,300.0	90.00	0.00	10,300.0	1,204.9	0.0	1,204.9	0.00	0.00	0.00
11,400.0	90.00	0.00	10,300.0	1,304.9	0.0	1,304.9	0.00	0.00	0.00
11,500.0	90.00	0.00	10,300.0	1,404.9	0.0	1,404.9	0.00	0.00	0.00
11,600.0	90.00	0.00	10,300.0	1,504.9	0.0	1,504.9	0.00	0.00	0.00
11,700.0	90.00	0.00	10,300.0	1,604.9	0.0	1,604.9	0.00	0.00	0.00
11,800.0	90.00	0.00	10,300.0	1,704.9	0.0	1,704.9	0.00	0.00	0.00
11,900.0	90.00	0.00	10,300.0	1,804.9	0.0	1,804.9	0.00	0.00	0.00
12,000.0	90.00	0.00	10,300.0	1,904.9	0.0	1,904.9	0.00	0.00	0.00
12,100.0	90.00	0.00	10,300.0	2,004.9	0.0	2,004.9	0.00	0.00	0.00
12,200.0	90.00	0.00	10,300.0	2,104.9	0.0	2,104.9	0.00	0.00	0.00
12,300.0	90.00	0.00	10,300.0	2,204.9	0.0	2,204.9	0.00	0.00	0.00
12,400.0	90.00	0.00	10,300.0	2,304.9	0.0	2,304.9	0.00	0.00	0.00
12,500.0	90.00	0.00	10,300.0	2,404.9	0.0	2,404.9	0.00	0.00	0.00
12,600.0	90.00	0.00	10,300.0	2,504.9	0.0	2,504.9	0.00	0.00	0.00
12,700.0	90.00	0.00	10,300.0	2,604.9	0.0	2,604.9	0.00	0.00	0.00
12,800.0	90.00	0.00	10,300.0	2,704.9	0.0	2,704.9	0.00	0.00	0.00
12,900.0	90.00	0.00	10,300.0	2,804.9	0.0	2,804.9	0.00	0.00	0.00
13,000.0	90.00	0.00	10,300.0	2,904.9	0.0	2,904.9	0.00	0.00	0.00
13,100.0	90.00	0.00	10,300.0	3,004.9	0.0	3,004.9	0.00	0.00	0.00
13,200.0	90.00	0.00	10,300.0	3,104.9	0.0	3,104.9	0.00	0.00	0.00
13,300.0	90.00	0.00	10,300.0	3,204.9	0.0	3,204.9	0.00	0.00	0.00

Wellplanning

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #6H
Company:	Regeneration Energy Corporation	TVD Reference:	WELL @ 3507.0usft (Original Well Elev)
Project:	Eea County, NM (NAD1983)	MD Reference:	WELL @ 3507.0usft (Original Well Elev)
Site:	E: Livingston Federal 31	North Reference:	Grid
Well:	#6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
13,400.0	90.00	0.00	10,300.0	3,304.9	0.0	3,304.9	0.00	0.00	0.00	
13,500.0	90.00	0.00	10,300.0	3,404.9	0.0	3,404.9	0.00	0.00	0.00	
13,600.0	90.00	0.00	10,300.0	3,504.9	0.0	3,504.9	0.00	0.00	0.00	
13,700.0	90.00	0.00	10,300.0	3,604.9	0.0	3,604.9	0.00	0.00	0.00	
13,800.0	90.00	0.00	10,300.0	3,704.9	0.0	3,704.9	0.00	0.00	0.00	
13,900.0	90.00	0.00	10,300.0	3,804.9	0.0	3,804.9	0.00	0.00	0.00	
14,000.0	90.00	0.00	10,300.0	3,904.9	0.0	3,904.9	0.00	0.00	0.00	
14,100.0	90.00	0.00	10,300.0	4,004.9	0.0	4,004.9	0.00	0.00	0.00	
14,200.0	90.00	0.00	10,300.0	4,104.9	0.0	4,104.9	0.00	0.00	0.00	
14,300.0	90.00	0.00	10,300.0	4,204.9	0.0	4,204.9	0.00	0.00	0.00	
14,400.0	90.00	0.00	10,300.0	4,304.9	0.0	4,304.9	0.00	0.00	0.00	
14,500.0	90.00	0.00	10,300.0	4,404.9	0.0	4,404.9	0.00	0.00	0.00	
14,600.0	90.00	0.00	10,300.0	4,504.9	0.0	4,504.9	0.00	0.00	0.00	
14,700.0	90.00	0.00	10,300.0	4,604.9	0.0	4,604.9	0.00	0.00	0.00	
14,800.0	90.00	0.00	10,300.0	4,704.9	0.0	4,704.9	0.00	0.00	0.00	
14,841.1	90.00	0.00	10,300.0	4,746.0	0.0	4,746.0	0.00	0.00	0.00	
TD at 14841.1 - PBHL(ELivingston #6H)										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
hit/miss target										
Shape										
PBHL(ELivingston #6H)	0.00	0.07	10,300.0	4,746.0	0.2	493,169.70	730,182.00	32° 21' 15.521 N	103° 43' 18.392 W	
- plan misses target center by 0.2usft at 14841.1usft MD (10300.0 TVD, 4746.0 N, 0.0 E)										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
9,822.5	9,822.5	0.0	0.0	KOP - 9822.5 'MD, 0.00° INC, 0.00° AZI	
10,572.6	10,300.0	477.5	0.0	EOC- 10572.6 'MD, 90.00° INC, 0.00° AZI	
14,841.1	10,300.0	4,746.0	0.0	TD at 14841.1	



Regeneration Energy Corporation
Project: Lea County, NM (NAD1983)
Site: E. Livingston Federal 31
Well: #6H
Wellbore: OH
Plan: Design #1 (#6H/OH)

Section Details

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	9822.5	0.00	0.00	9822.5	0.0	0.0	0.00	0.00	0.0
3	10572.6	90.00	0.00	10300.0	477.5	0.0	12.00	0.00	477.5
4	14841.1	90.00	0.00	10300.0	4746.0	0.0	0.00	0.00	4746.0

WELL DETAILS: #6H

Ground Elevation:: 3490.0
RKB Elevation: WELL @ 3507.0usft (Original Well Elev)
Rig Name: Original Well Elev

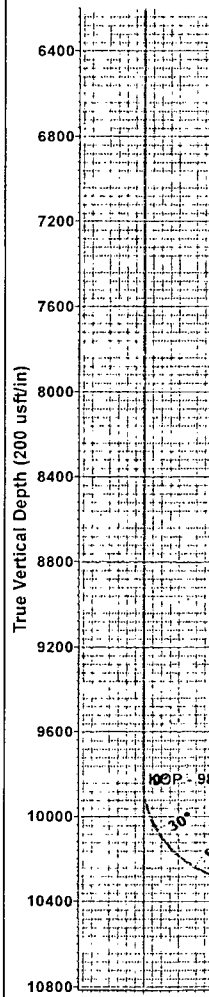
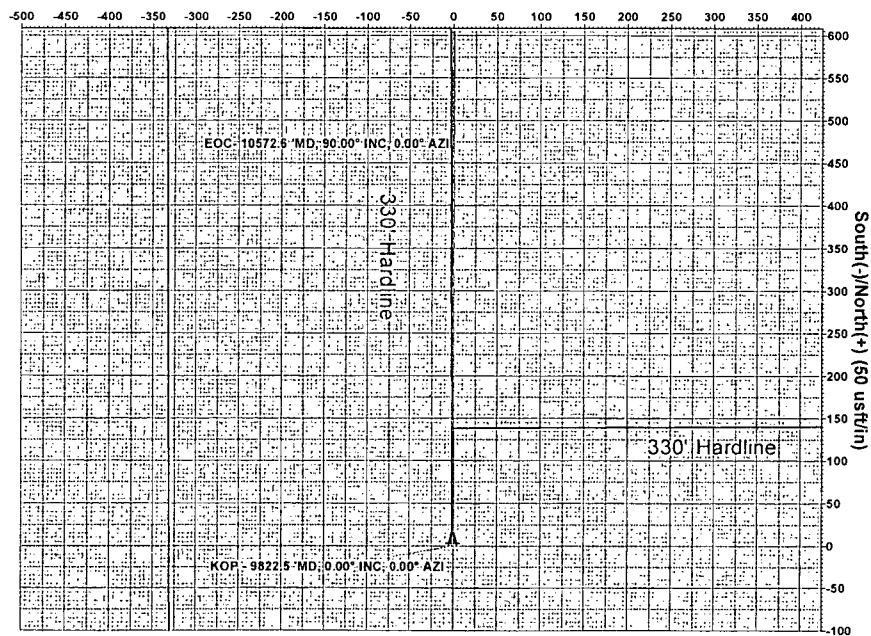


Azimuths to Grid North
True North: -0.33°
Magnetic North: 7.02°

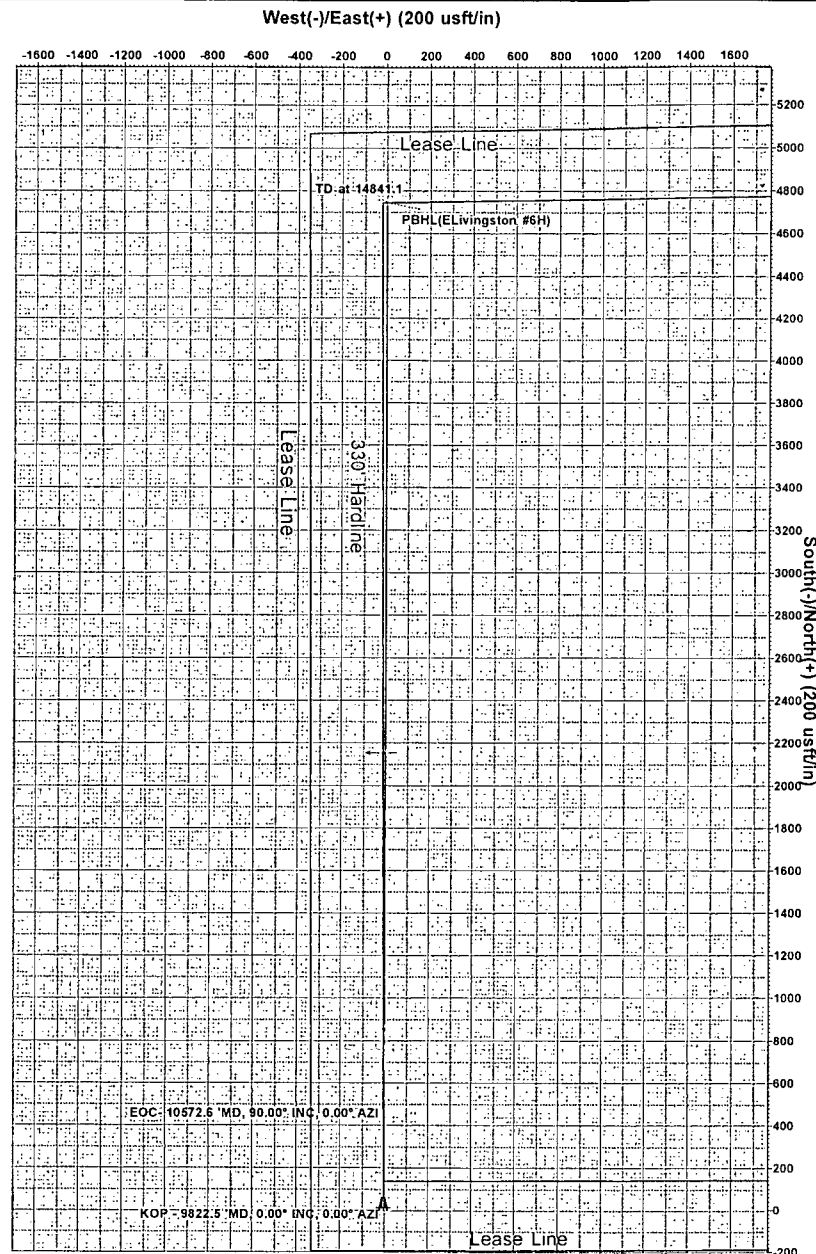
Magnetic Field
Strength: 48409.0snT
Dip Angle: 60.20°
Date: 1/24/2014
Model: IGRF2010

Northing 488423.70 Easting 730181.80 Latitude 32° 20' 28.558 N Longitude 103° 43' 18.711 W

West(-)/East(+) (50 usft/in)



Vertical Section at 0.00° (200 usft/in)



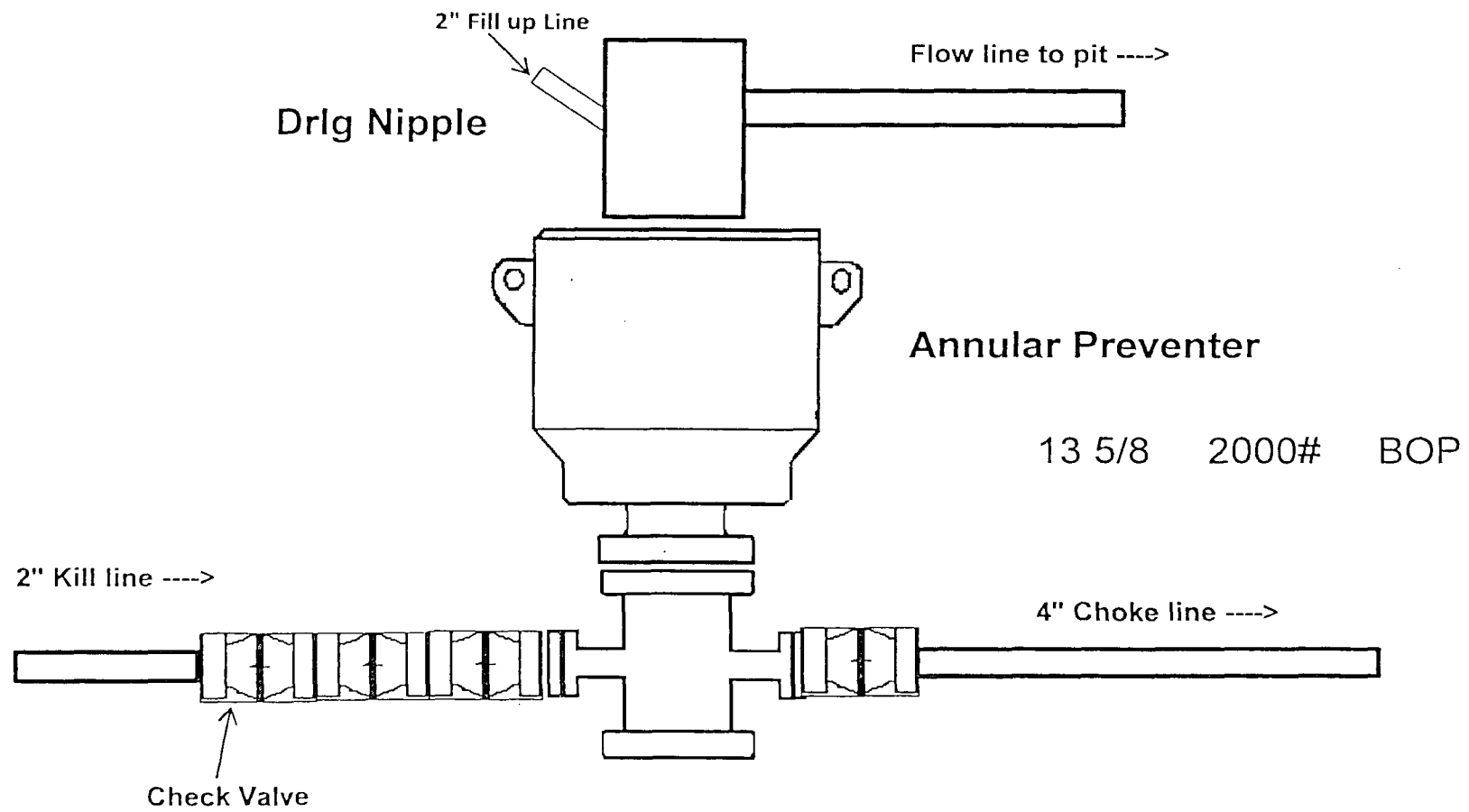
PROJECT DETAILS: Lea County, NM (NAD1983)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level
Local North: Grid

Plan: Design #1 (#6H/OH)
Date: 9:52, January 24 2014

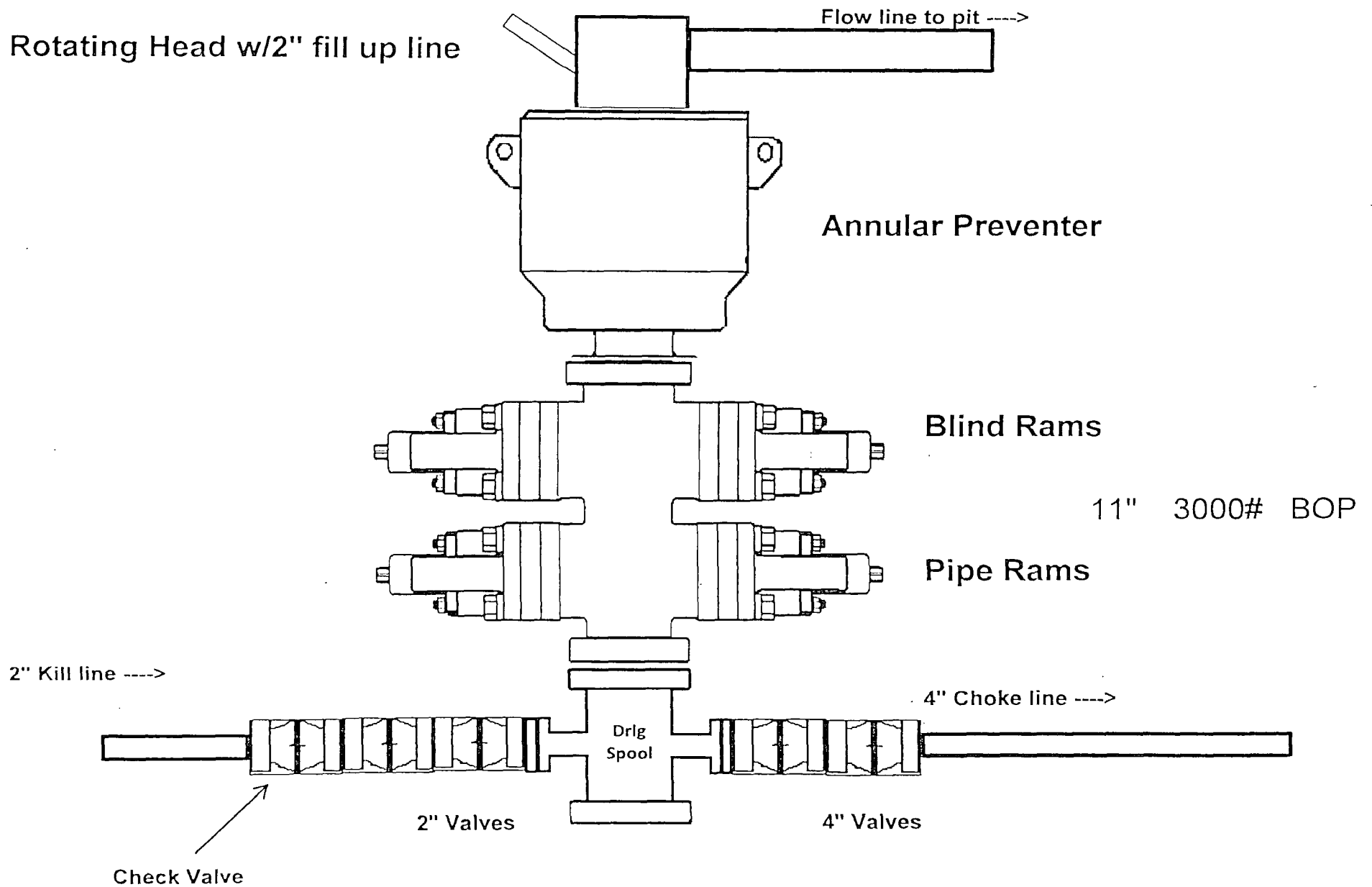


Terra Directional Services LLC
322 Spring Hill Drive, Suite A300, Spring, Tx 77386
Phone: 432-425-7532

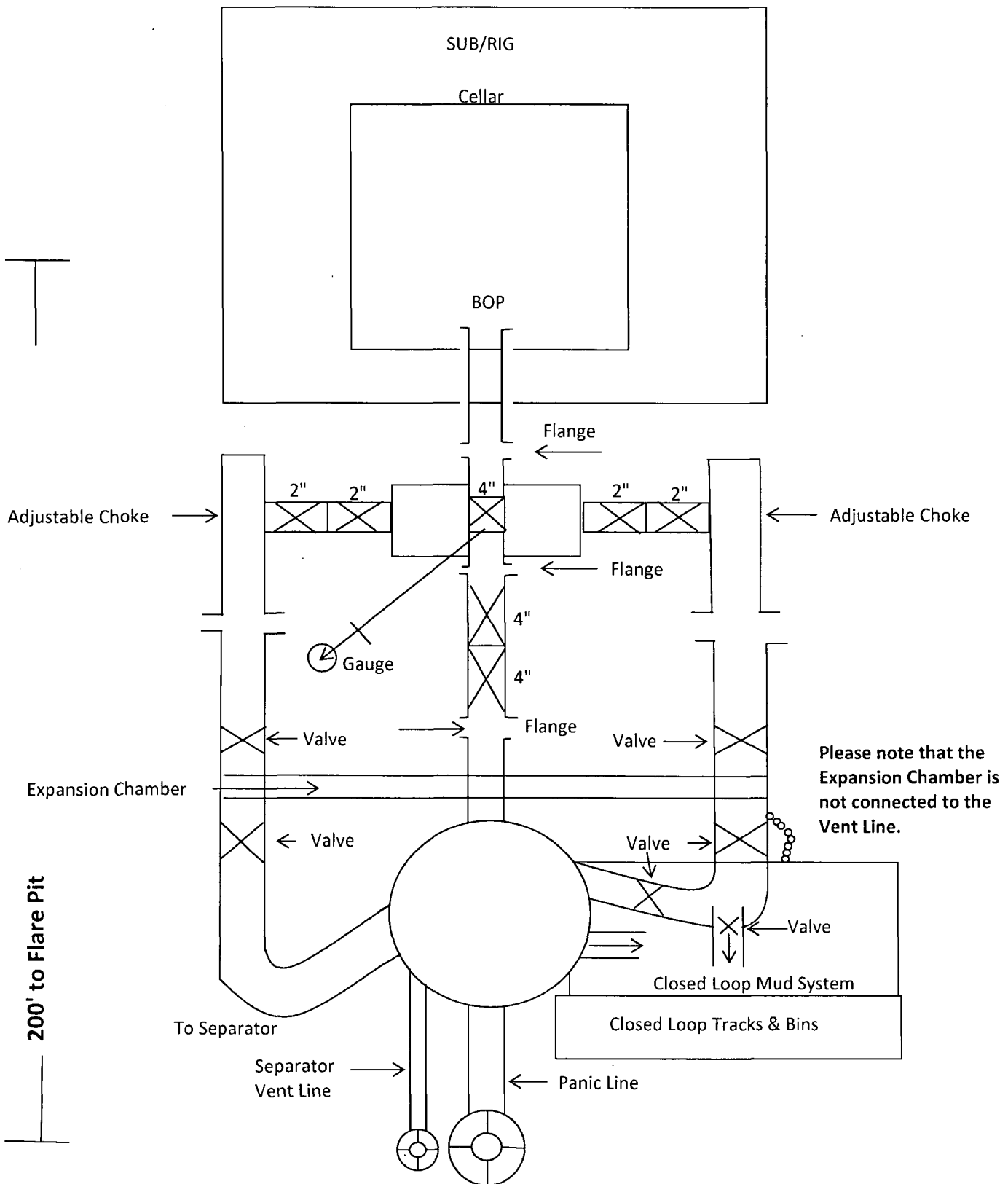
2,000 psi BOP Schematic



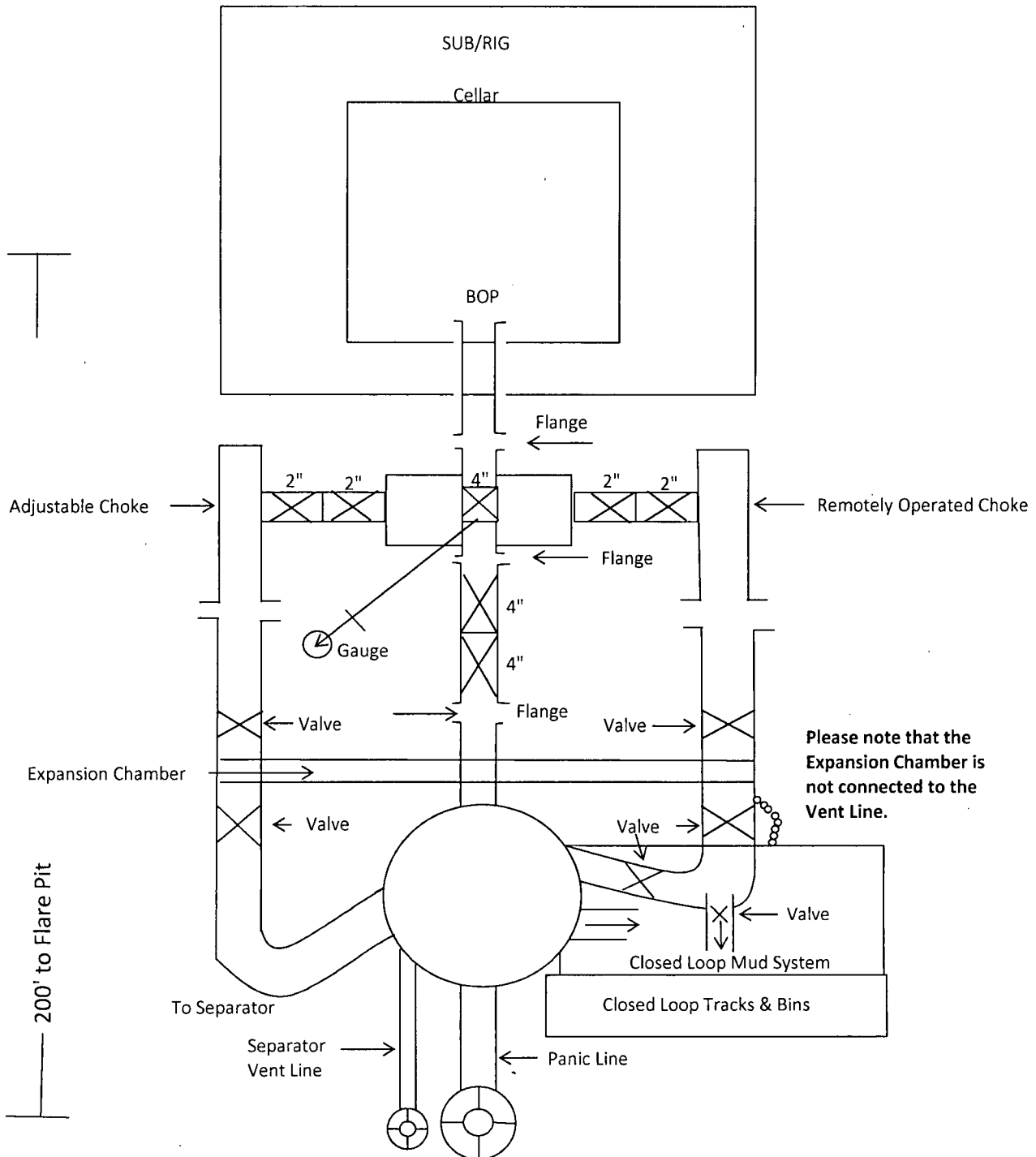
3,000 psi BOP Schematic



2M Choke Manifold Equipment

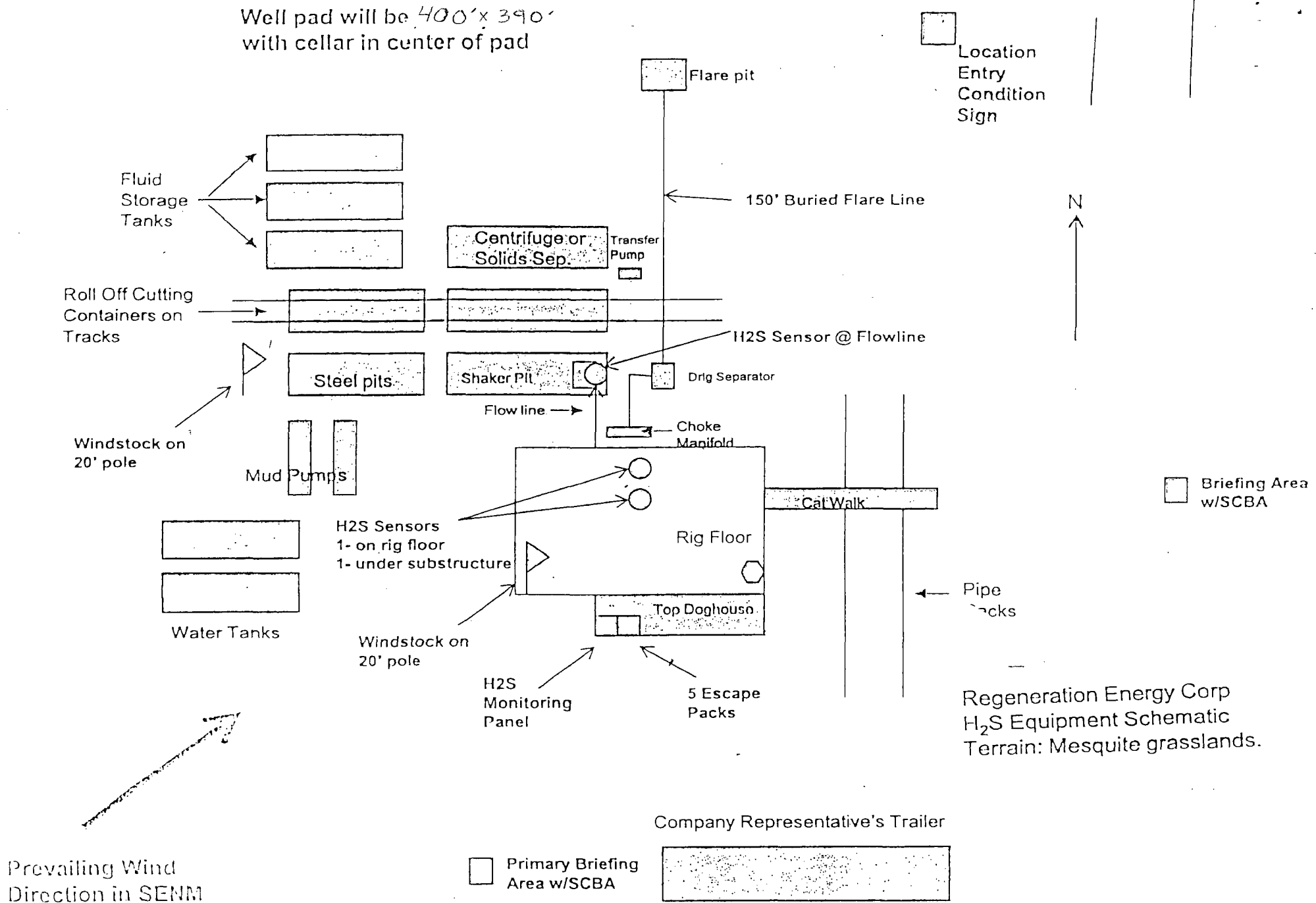


3M Choke Manifold Equipment



Secondary egress.

Well pad will be 400' x 390'
with cellar in center of pad



Regeneration Energy Corp.

Rig Plat & Closed Loop Equipment Diagram

Well pad will be 400' X 390'
with cellar in center of pad

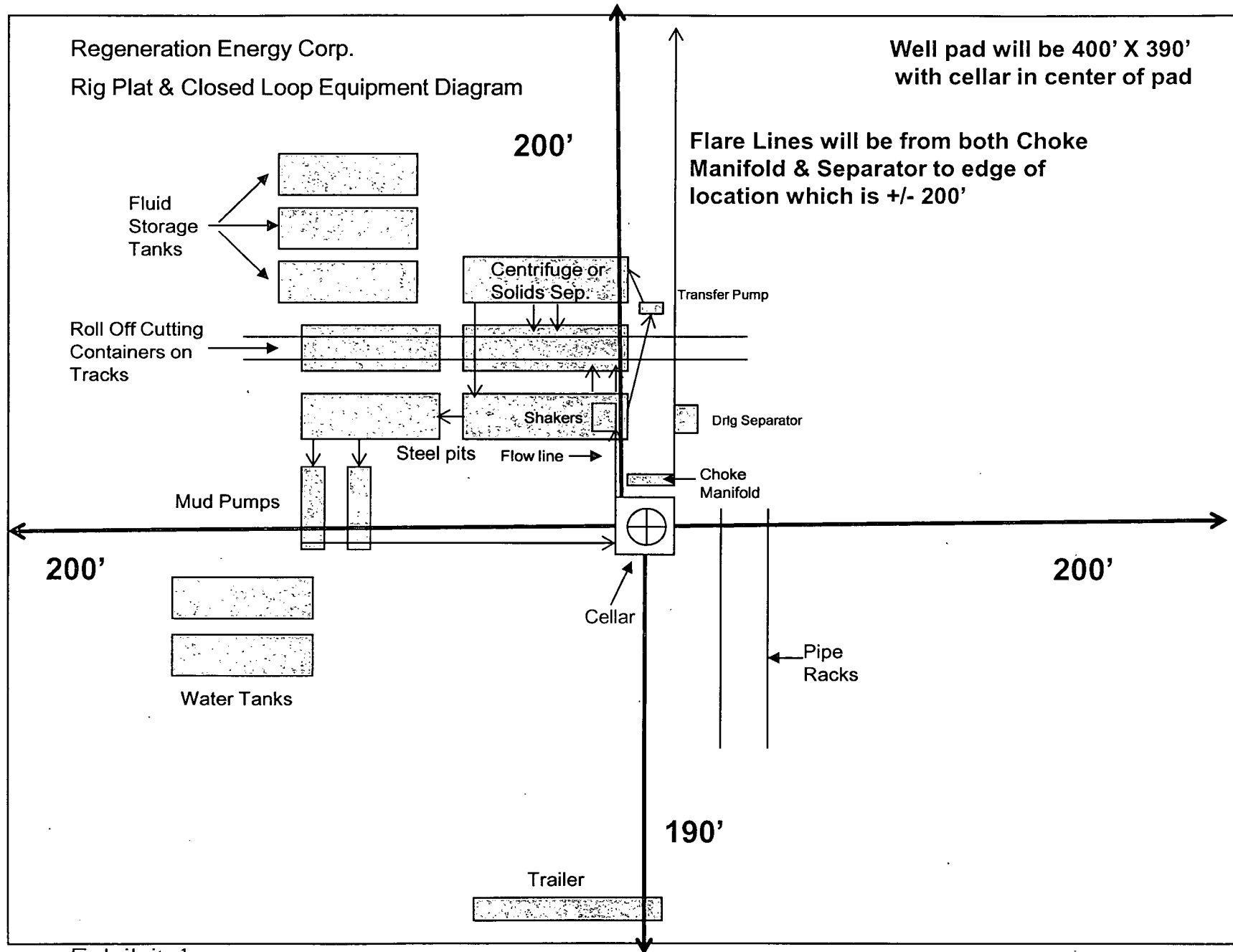


Exhibit 1

"I further certify that Regen will comply with Rule 19.15.17
NMAC by using a Closed Loop System."