

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

Energy Minerals and Natural Resources**Oil Conservation Division****NM OIL CONSERVATION**

ARTESIA DISTRICT

AMENDED REPORT

1220 South St. Francis Dr.

AUG 02 2017

Santa Fe, NM 87505

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

| | | |
|---|--|---|
| ¹ Operator Name and Address Percussion Petroleum Operating, LLC 919 Milam St., Suite 2475, Houston, TX 77002 | | ² OGRID Number 371755 |
| ⁴ Property Code 318940 | | ³ API Number 30-015-44365 |
| ⁵ Property Name Goodman 22 | | ⁶ Well No. 6H |

7. Surface Location

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| K | 22 | 19S | 25E | | 1474 | South | 2366 | West | Eddy |

*** Proposed Bottom Hole Location**

| UL - Lot | Section | Township | Range | Lot Idn | Feet from | N/S Line | Feet From | E/W Line | County |
|----------|---------|----------|-------|---------|-----------|----------|-----------|----------|--------|
| K | 23 | 19S | 25E | | 1390 | South | 2658 | West | Eddy |

9. Pool Information

| Pool Name | Pool Code |
|--------------------------------|-----------|
| N. SEVEN RIVERS; GLORIETA-YESO | 97565 |

Additional Well Information

| ¹¹ Work Type | ¹² Well Type | ¹³ Cable/Rotary | ¹⁴ Lease Type | ¹⁵ Ground Level Elevation |
|-------------------------|------------------------------|--|--------------------------|--------------------------------------|
| N | O | R | P | 3458' |
| ¹⁶ Multiple | ¹⁷ Proposed Depth | ¹⁸ Formation | ¹⁹ Contractor | ²⁰ Spud Date |
| N | 7,880' | Yeso | Silver Oak Drilling | 9/15/2017 |
| 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 | 12.25 | 9.625 | 36 | 1,215' | 600 | Surface |
| Production | 8.75 | 5.5 | 17 | 7,880' | 2000 | Surface |
| | | | | | | |

Casing/Cement Program: Additional Comments**22. Proposed Blowout Prevention Program**

| Type | Working Pressure | Test Pressure | Manufacturer |
|-----------------------------|------------------|--------------------|--------------|
| 13 5/8" Double-Ram, Annular | 5,000 psi | 250 low/ 3000 high | Shaffer |

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: *Patrick Wales*

Printed name: Patrick Wales

Title: Drilling Engineer

E-mail Address: pwales@totalenergyservices.us

Date: 8/2/2017

Phone: 432-682-1598

OIL CONSERVATION DIVISION

Approved By:

Raymond G. Podany

Title:

Geologist

Approved Date: 8-2-17

Expiration Date: 8-2-19

Conditions of Approval Attached

Circ Cmt on Surf.

Casing

DISTRICT I
1626 N. French Dr., Hobbs, NM 88240
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DISTRICT IV
1226 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 478-3460 Fax: (505) 478-3468

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised August 1, 2011

OIL CONSERVATION DIVISION

1226 South St. Francis Dr.
Santa Fe, New Mexico 87505

NM OIL CONSERVATION
ARTESIA DISTRICT

AUG 02 2017

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

RECEIVED AMENDED REPORT

| | | |
|-----------------------------------|---|--|
| API Number 30-015-44365 | Pool Code 97565 | Pool Name N. Arden Rivers; Glop-Yeso |
| Property Code 318940 | Property Name GOODMAN 22 | Well Number 6H |
| OGRID No. 371755 | Operator Name PERCUSSION PETROLEUM OPERATING, LLC | Elevation 3458' |

Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | FEET from the | North/South line | FEET from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| K | 22 | 19 S | 25 E | | 1474 | SOUTH | 2366 | 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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| N | 23 | 19 S | 25 E | | 1390 | SOUTH | 2658 | WEST | EDDY |

| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |
|-----------------|-----------------|--------------------|-----------|
| 200 | | | |

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

| | | | |
|---|--|---|--|
| SURFACE LOCATION Lat - N 32.642960° Long - W 104.473463° NMSPCE- N 597668.3 E 498204.7 (NAD-83) | FIRST TAKE POINT 1390' FSL & 2509' FEL Lat - N 32.642699° Long - W 104.472333° NMSPCE- N 597572.8 E 498552.6 (NAD-83) | LAST TAKE POINT 1390' FSL & 2578' FWL Lat - N 32.642678° Long - W 104.455806° NMSPCE- N 597558.8 E 503639.6 (NAD-83) | PROPOSED BOTTOM HOLE LOCATION Lat - N 32.642884° Long - W 104.455546° NMSPCE- N 597561.1 E 503719.6 (NAD-83) |
|---|--|---|--|

| | | | |
|--|--|--|--|
| N.: 601612.1 E.: 495832.6 (NAD 83) | N.: 601616.7 E.: 498466.0 (NAD 83) | N.: 601604.5 E.: 501083.6 (NAD 83) | N.: 601583.6 E.: 506490.6 (NAD 83) |
|--|--|--|--|

| | | | |
|--|--|--|--|
| N.: 598944.4 E.: 495836.5 (NAD 83) | N.: 596277.8 E.: 495841.1 (NAD 83) | N.: 596091.7 E.: 501053.5 (NAD 83) | N.: 596249.5 E.: 506392.8 (NAD 83) |
|--|--|--|--|

| | |
|--|-------------------------|
| OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. | |
| Signature Patrick Wales | Date 8/2/2017 |
| Printed Name Patrick Wales | |
| Email Address pwales@totalenergyservices.us | |

| | |
|--|---|
| 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. | |
| Date Surveyed JUNE 15, 2017 | Signature of Professional Surveyor 7977 |
| Certificate No. GOV. L. W. 7977 BASIN SURVEY | |

0' 500' 1000' 1500' 2000'

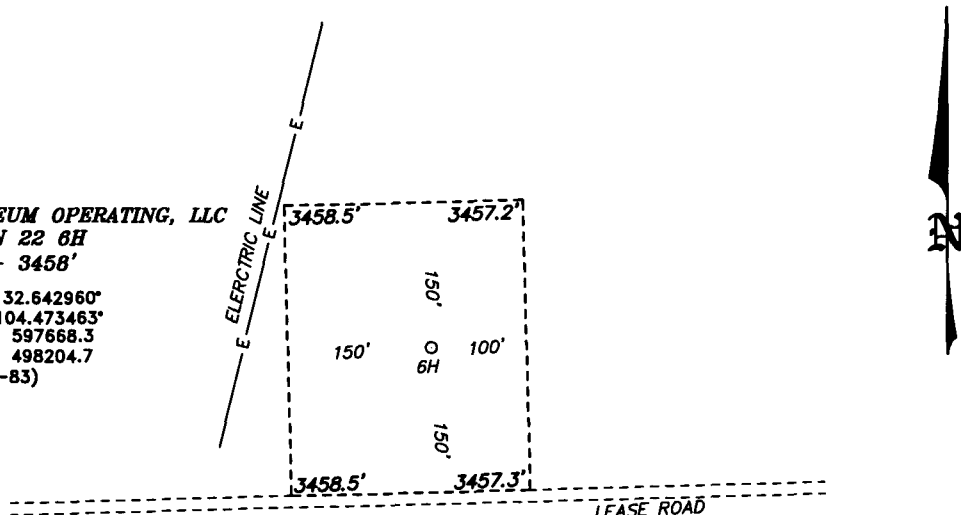
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WO Num.: 33047

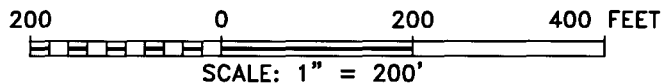
SECTION 22, TOWNSHIP 19 SOUTH, RANGE 25 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

PERCUSSION PETROLEUM OPERATING, LLC
GOODMAN 22 6H
ELEV. - 3458'

Lat - N 32.642960°
Long - W 104.473463°
NMSPCE- N 597668.3
E 498204.7
(NAD-83)



ARTESIA, NM IS ±14 MILES TO THE NORTHEAST OF LOCATION.



Directions to Location:

FROM US HIGHWAY 285 GO WEST ON ROCKING R
RED ROAD 4.3 MILES THEN GO SOUTH ON LEASE
ROAD 2000 FEET, THEN WEST 1400 FEET, THEN
SOUTH 1940 FEET, THEN GO WEST 295 FEET TO
PROPOSED PAD.

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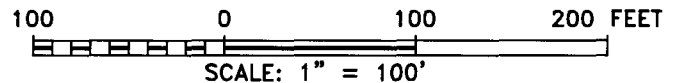
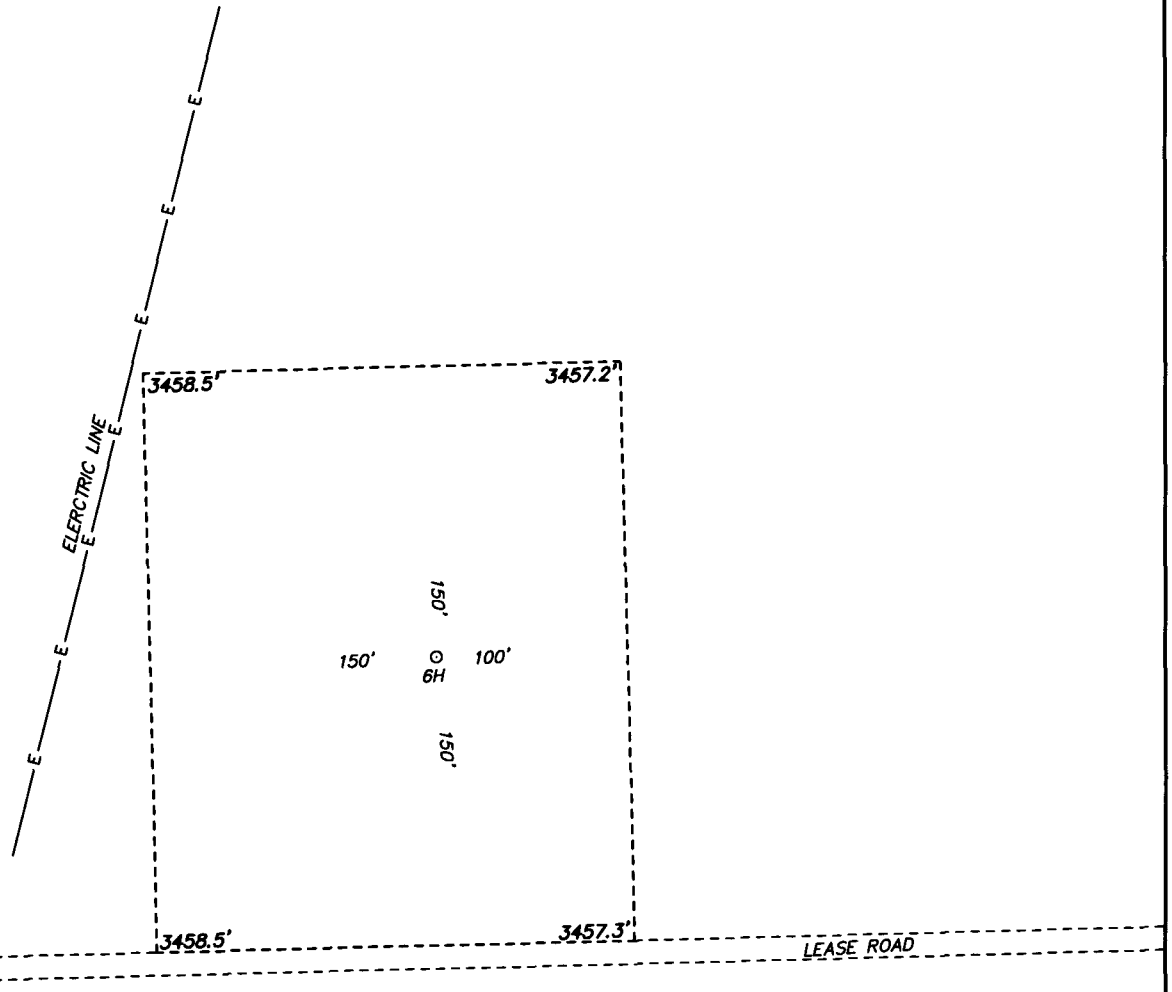
P.O. Box 1786 (575) 393-7316 - Office
1120 N. West County Rd. (575) 392-2206 - Fax
Hobbs, New Mexico 88241 basin-surveys.com

PERCUSSION PETROLEUM OPERATING, LLC

REF: GOODMAN 22 6H / WELL PAD TOPO

THE GOODMAN 22 6H LOCATED 1474' FROM
THE SOUTH LINE AND 2366' FROM THE WEST LINE OF
SECTION 22, TOWNSHIP 19 SOUTH, RANGE 25 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

SECTION 22, TOWNSHIP 19 SOUTH, RANGE 25 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



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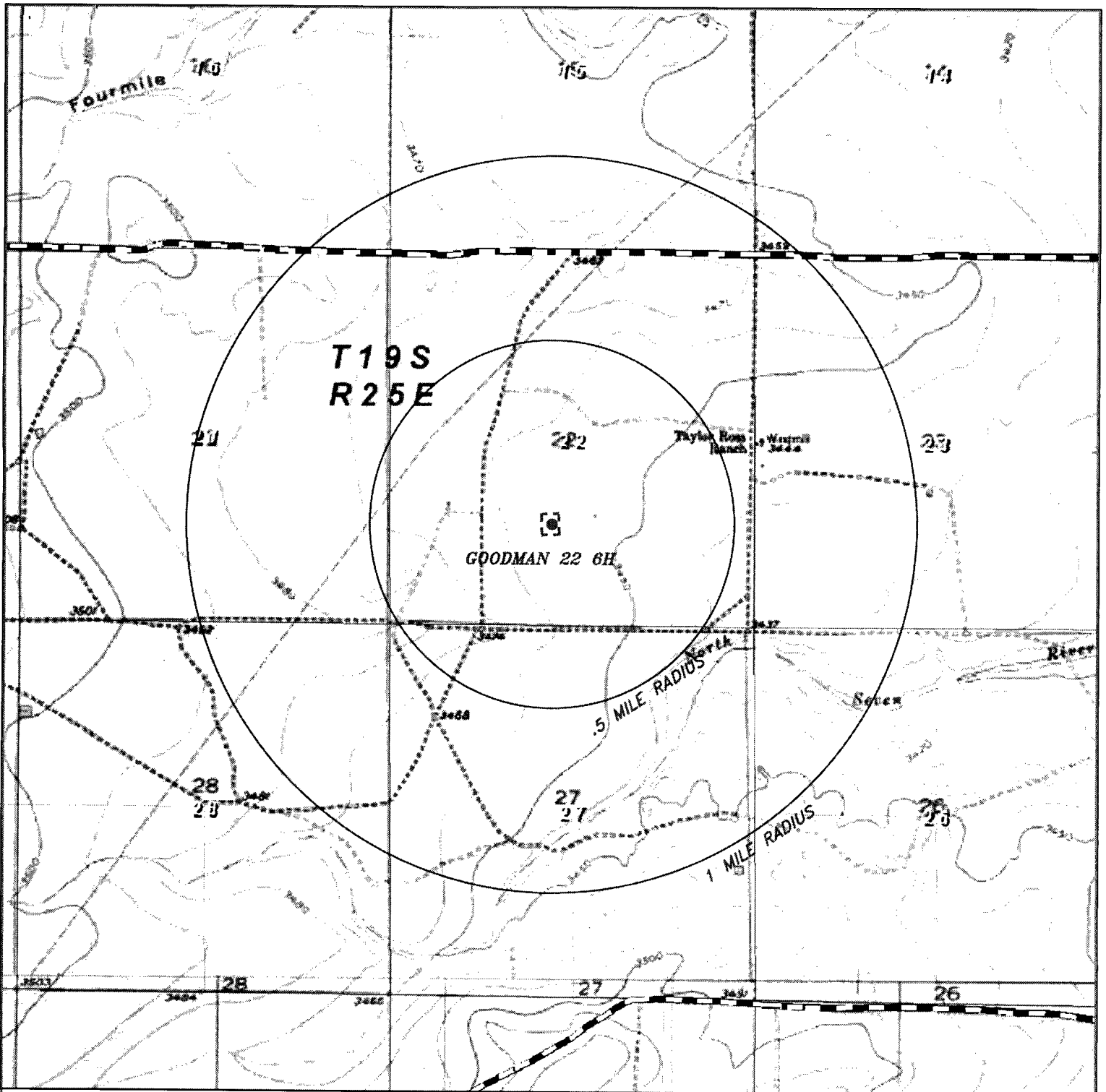
W.O. Number: 33047

Drawn By: J GOAD

Date: 6-15-2017

Survey Date: 6-8-2017

Sheet 1 of 1 Sheets



GOODMAN 22 6H

Located 1474' FSL and 2366' FWL
 Section 22, Township 19 South, Range 25 East,
 N.M.P.M., Eddy County, New Mexico.



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0' 1000' 2000' 3000' 4000'
 SCALE: 1" = 2000'

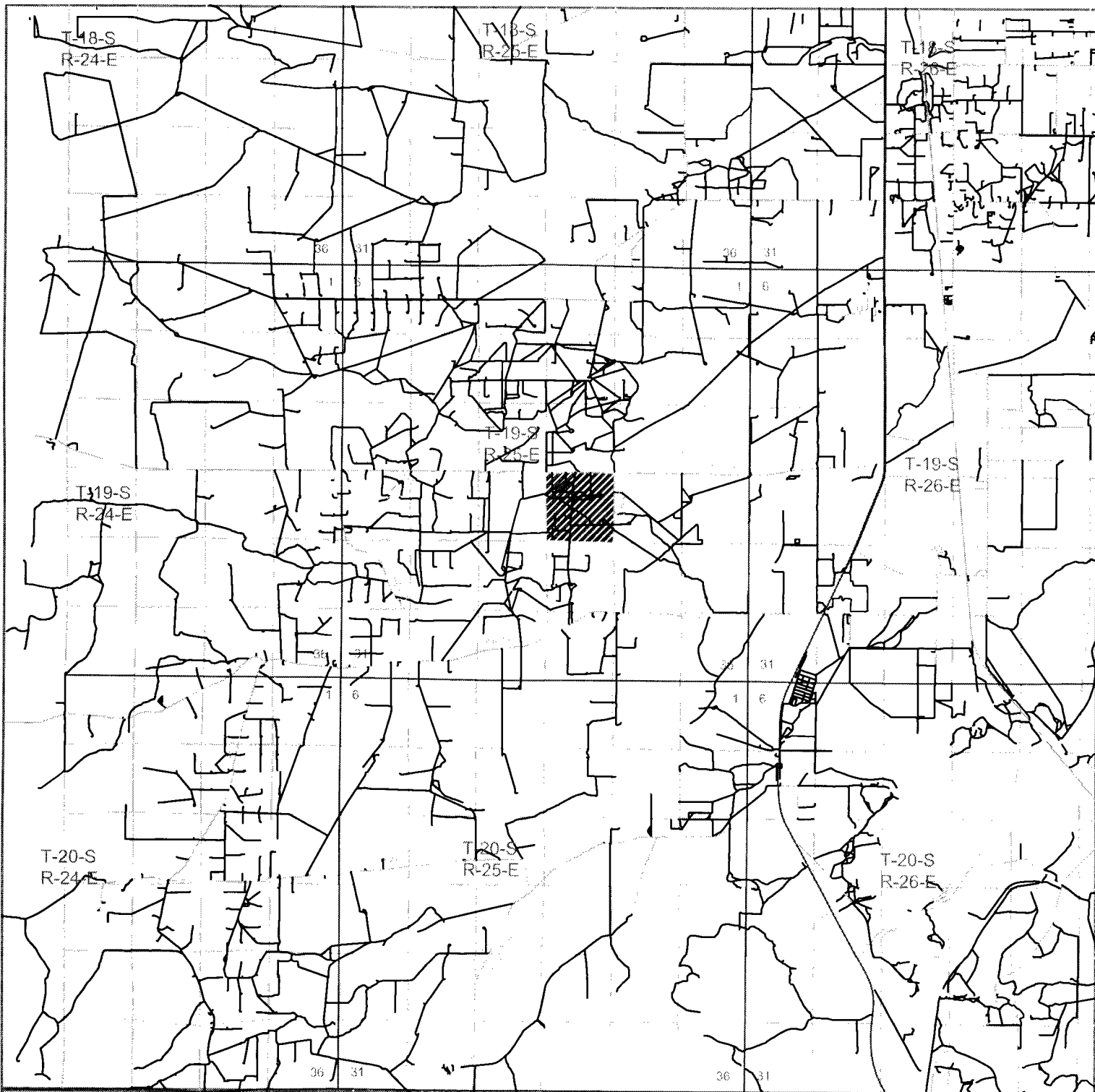
W.O. Number: JG 33047

Survey Date: 6-8-2017

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

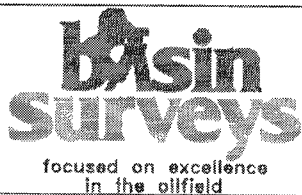


**PERCUSSION
 PETROLEUM
 OPERATING, LLC**



GOODMAN 22 6H

Located 1474' FSL and 2366' FWL
 Section 22, Township 19 South, Range 25 East,
 N.M.P.M., Eddy County, New Mexico.



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0 1 MI 2 MI 3 MI 4 MI
 SCALE: 1" = 2 MILES

W.O. Number: JG 33047

Survey Date: 6-8-2017

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

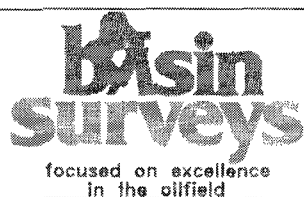


**PERCUSSION
 PETROLEUM
 OPERATING, LLC**



GOODMAN 22 6H

Located 1474' FSL and 2366' FWL
 Section 22, Township 19 South, Range 25 East,
 N.M.P.M., Eddy County, New Mexico.



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basinsurveys.com

0' 1000' 2000' 3000' 4000'
 SCALE: 1" = 2000'

W.O. Number: JG 33047

Survey Date: 6-8-2017

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



**PERCUSSION
 PETROLEUM
 OPERATING, LLC**



Percussion Petroleum Operating, LLC

Well: Goodman 6H

Location: **SHL** Section 22, T19S, R25E, 1474 FSL, 2366 FWL
 Lat: 32.642960° N, Long: -104.473463° W
 State Plane NME-3001: N: 597668.3, E: 498204.7

BHL Section 23, T19S, R25E, 1390 FSL, 2658 FWL
 Lat: 32.642684° N, Long: -104.455546°W
 State Plane NME-3001: N: 597561.1, E: 503719.6

County: Eddy

State: New Mexico

Rig: Silver Oak Drilling

Spud Date: Sep-17

AFE Number:

True Vertical Depth: 2869' ft
Total Measured Depth: 7880' ft

Elevation: GL = 3,458' KB= 25'

Directions: From the intersection of Highway 285 and Rockin R Red Road go west approximately 3.5 miles turn left (south) onto lease road.

Prepared By: Lelan J Anders

Operations Manager: Lelan J Anders

Engineering: Lelan J Anders

Exploration: C.J. Lipinski

Land: Josh Grisham

DRILLING PROGRAM

CASING DEPTHS:

9-5/8" 32# J-55 LT&C set at **1,213 ft** inside
12 1/4 open hole, cemented to surface

5 1/2" 17# L-80 BT&C set at **7,870 ft** inside
8 3/4 open hole, cemented to surface

POTENTIAL PROBLEMS: 0' - 1213' Gravel, Red Beds and Water Sands. Seepage and loses. Tight hole.

1213' - TD Hole cleaning, seepage, and loses.

MUD PROGRAM:

| <u>Interval</u> | <u>Mud Type</u> | <u>Mud Weight</u> | <u>Viscosity</u> | <u>Water Loss</u> | <u>Plastic Viscosity</u> | <u>Yield Point</u> |
|--|-----------------|-------------------|------------------|-------------------|--------------------------|--------------------|
| 0' - 1213' | FW / Gel | 8.4 - 9.2 PPG | 36 - 42 | NC | 3 - 5 | 5 - 7 |
| Paper and gel sweeps to clean hole | | | | | | |
| 1213' - KOP' | FW / Cut Brine | 8.3 - 9.2 PPG | 28 - 30 | NC | 1 | 1 |
| Gel sweeps to clean hole and LCM pills for loss circulation. Raise vis to 34 - 40 if needed. | | | | | | |
| KOP' - TD' | Cut Brine | 8.6 - 9.2 PPG | 29 - 32 | 10 - 12 | 4 - 5 | 6 - 10 |
| Salt gel sweeps to clean hole and LCM pill for loss circulation. Only acid soluble LCM below surface casing. Increase vis to 34 - 40 if needed. If drag becomes a problem add Surfac PG. Drill curve and lateral section with XCD Polymer / Cut Brine / Starch system. | | | | | | |
| Drill as close to pressure balanced as possible. | | | | | | |
| Estimated BHP for the Yeso formation is 1100 psi. | | | | | | |

Mud additions to be coordinated through PPO representative.

This program is only a guide and hole conditions will dictate mud system requirements and changes.

ESTIMATED FORMATION TOPS / LITHOLOGY:

3,458' Ground Level 25' RKB

| <u>Formation</u> | <u>MD</u> | <u>TVD</u> | <u>SS</u> | <u>Lithology</u> |
|------------------|-----------|------------|-----------|------------------|
| San Andes | | 812 | 2646 | Dolomite |
| Glorieta | | 2437 | 1021 | Silty Dolomite |
| Yeso | | 2573 | 885 | Dolomite |
| Tubb | | 3179 | 279 | Dolomite |

DRILL STEM TEST:

None

MUD LOGGING:

A one man mud logging unit will be in service prior to spudding well to total depth. Samples in the lateral/pay will be taken every 10'. Mud logger will assist in picking surface casing point. Only authorized personnel will be allowed access to mud logging unit. Mud logger will be in contact with C.J. Lipinski. EOL at 100' FSL is a hard line. Cut short to 120' FSL to avoid crossing hard line. Do not exceed without approval from Lelan J Anders, Operations Manager. Drilling Foreman is to be notified of changes in drilling parameters.

ELECTRIC LINE LOGS

None

DIRECTIONAL SURVEYS:

Straight hole specifications. Maximum deviation from vertical shall be no more than 3° inclination. We will directionally drill according to the well plan in order to hit our intended landing zone. We will drill as per directional plan to ~100 ft from lease line enabling us to locate our FTP 330' FSL. We will run 5 1/2" casing with 2 jt shoe track to TD and cement in place. Our LTP will be 330' FNL. See directional plan for more details.
THIS IS A HORIZONTAL WELL WITH EXTREMELY TIGHT TOLERANCES. KEEP LELAN ANDERSON AND CJ LIPINSKI INFORMED WITH ANY PROBLEMS MAINTAINING TARGET.

Straight Hole Specifications

| Well Depth Feet | Maximum Distance Between Surveys | Maximum Deviation From Vertical |
|--------------------|---|------------------------------------|
| 0' - 100' | | 3° |
| 100' - 2,000' | MWD and Motor thru this section of hole.* | 10° |
| 2,000' - TD | MWD and Motor thru this section of hole. | |

* Depending on directional plan. If vertical hole is used to 1800' MD (surface casing point) then minimum distance between surveys will be 250' MD 3° max deviation from vertical

WELLHEAD EQUIP:

9-5/8" Casing 9-5/8" 3M x 11" 3M SOW
 5 1/2" Casing 11" 5M x 7-1/16" 10M Tubing Head

CASING DESIGN:**9-5/8" CASING**

| | | |
|--------------------------------|------------------|-------------|
| 9-5/8" Shoe | Casing Burst: | 3,520 psi |
| 1 Jt 9-5/8" 36# J-55 STC | Casing Collapse: | 2,020 psi |
| 9-5/8" Insert Float | Casing Tensile: | 394,000 lbs |
| 9-5/8" 36# J-55 STC To Surface | | |

CASING SAFETY FACTORS

| | API Recommended Safety Factor | Actual Safety Factor | Scenario | External Fluids | Internal Fluids |
|-----------|----------------------------------|-------------------------|------------------|---------------------------------------|-----------------|
| Collapse: | 1.125 | 3.30 | Lost Circulation | Mud | None |
| Burst: | 1.125 | 1.46 | Plug Bump | Cement + 2000 psi applied pressure | Mud/Water |
| Tensile: | 1.8 | 2.80 | 100k Overpull | Mud | Mud |

CENTRALIZER PLACEMENT

Stop collar 10 feet above shoe with centralizer. One on first collar and every fourth collar to surface, or as required by the BLM.

5 1/2" CASING

| | | |
|--------------------------|------------------|-------------|
| 5 1/2" Shoe | Casing Burst: | 7,740 psi |
| 2 Jts 5 1/2" 17# L80 BTC | Casing Collapse: | 6,280 psi |
| 5 1/2" Float Collar | Casing Tensile: | 348,000 lbs |

5 1/2" 17# L80 BTC Casing To Surface

CASING SAFETY FACTORS

| | API Recommended Safety Factor | Actual Safety Factor | Scenario | External Fluids | Internal Fluids |
|-----------|----------------------------------|-------------------------|------------------|---------------------------------------|-----------------|
| Collapse: | 1.125 | 3.75 | Lost Circulation | Mud | None |
| Burst: | 1.125 | 2.47 | Plug Bump | Cement + 2000 psi applied pressure | Mud/Water |
| Tensile: | 1.8 | 2.29 | 100k Overpull | Mud | Mud |

CENTRALIZER PLACEMENT

Stop collar 10 feet above shoe with centralizer. One on first collar and every 10 collars to 1200 feet with one centralizer in 9-5/8" casing, or as required by the BLM.

REQUIREMENTS FOR ALL CASING:

Long string casing to be hydro tested before leaving yard.
Thread lock Float Shoe and joint connection between float equipment.
Unload and visually inspect casing, arranging on racks in order of running.
Strap all casing as it is unloaded, threads off. Count all joints on location.
Clean and inspect threads, drift, redope.
Check all casing markings and threads for correctness.
Check crossovers and crossover collars. Have back up collars.
Rope off and mark all casing not to be used.
PPO representative to supervise all casing operations.
Torque casing to optimal value.

CEMENT SCHEDULE:

9-5/8" CASING

Annular Volume: **379.9** cubic ft

Lead Cement: **605.2 sks** Class "C" + 2% CaCl + 0.25 pps Celloflake

Weight 14.8 ppg, Yield 1.32 cfs, Mix Water 6.3 gps.

These volumes based on circulating cement to surface plus 100% excess

If cement does not circulate 1 inch cement to surface.

5 1/2" CASING

Annular Volume: **2008.0** cubic ft

Lead Cement: **494.9 sks** 65/65/6 Class "C" + 6% gel + 5% salt + 0.25pps Celloflake + 0.2% C41-

Weight 12.6 ppg, Yield 1.97 cfs, Mixing Water 10.84 gps

Tail Cement: **1556.5 sks** Class "C" + 2% CaCl + 0.25pps Celloflake

Weight 14.8 ppg, Yield 1.32 cfs, Mix Water 6.3 gps.

These volumes based on circulating cement to surface plus 50% excess

REQUIREMENTS FOR ALL CEMENT:

Have cement supervisor independently check cement volumes and displacement volumes.
Collect and identify cement sample from each pod.
Minimize out of hole time. Have cement head already installed on casing joint etc.
Run casing at a smooth even pace being certain not to break down well bore.
Plan for unexpected events, plug doesn't bump at target volume, pump or lift pressures off, etc.
Do not over pump displacement volume.
Ensure plug dropped behind good cement. Chase plug with 10 bbls of sugar water.
Weigh cement samples and take wet samples throughout job.

Run material balance at end of each job to ensure water and cement volumes used confirm was mixed at proper weight as designated.

DRILLING PROCEDURE

1. Build road and location as per rig requirements. Install Conductor to 90 ft. (THIS IS A CLOSED LOOP MUD SYSTEM)
2. Notify OCD (Artesia District 2) of rig moving in and tentative spud date.
3. Move in and rig up drill rig. Install valve in conductor pipe. Rig up closed loop system.
4. Order float equipment, Texas Pattern Guide Shoe, centralizers, and 9-5/8" casing to location. Visually inspect casing and arrange on racks in order of running. Rope off and mark all casing not to be used. Count all joints. Strap casing as it is unloaded (THREADS OFF). Inspect casing and check all casing markings and threads for correctness. Inspect and clean threads, redope, and drift casing. Closely inspect any crossover joints and have back up crossover collars on location. PPO supervisor to oversee all casing inspections, drifting, strapping, etc.
5. Drill 12-1/4" hole with fresh water Native Spud Mud to TD of surface hole interval. BHA 12-1/4" bit, bit sub, 12" OD stabilizer, 1- 8" drill collar, 12" OD stabilizer, 6 - 8" drill collars and 9 - 6" drill collars. Directional surveys as per DD and MWD company to stay on well plan to TD of surface hole.
6. Notify OCD of TD and cement job.
7. Pump 2 high vis sweeps and circulate hole clean prior to pulling out of hole.
8. Pull out of hole and record any tight spots on IADC report. SLM out of hole. Make sure cement crew will be on location and rigged up before casing is on bottom prior to starting out of hole. Keep hole full.
9. Rig up casing crew and run 9-5/8" casing per casing design. Fill casing every 5 joints and circulate one joint off bottom. Run centralizers per design or as required by NMOCD. Wash to bottom if necessary.
10. Rig up cementers and test lines to 2000 psi. Have cement supervisor INDEPENDENTLY check cement volumes and displacement volumes. Collect and identify cement sample from each pod. Minimize out of hole time.
11. Circulate casing for 3 casing volumes minimum or until hole cleans up. While circulating hold final job meeting with cement company going over cement volumes, mixing water requirements, displacement volumes, pump pressure and rates, and contingency plans for unexpected events (i.e. plug does not bump at theoretical displacement volume etc.). Add 100% excess to calculated cement volume required. Don't over displace. Top out cement to surface with 1" tubing IF necessary.
12. Pump 20 barrels fresh water spacer ahead and pump cement volume per cement design for 9-5/8" casing and PPO representative. Bump plug to 500 psi over pump pressure. Drop plug in good cement. Record cement to surface on IADC report.
13. Hang casing in full tension. Close cement head for 8 hours.
14. WOC 8 hours before cutting off and 24 hours before drilling out per NMOCD rules.
15. Cut off casing and install 9-5/8" 3M x 11" 3M SOW A-section.
16. Nipple up BOP and test to 500 psi low and 3000 psi high with an independent test company before drilling out.
17. Pick up 8-3/4" bit, and directional drilling BHA. Trip in hole, tag cement and record on IADC report. Test casing to 1000 psi. Drill out float collar and float shoe with fresh water / cut brine 8.3 - 9.2 ppg to a depth Increase mud vis to 30-34 for hole cleaning and samples if needed. Mud program is a guide and hole conditions will dictate mud system requirements or changes. All mud additions will be coordinated through PPO representative.
18. Order float equipment, guide shoe, centralizers, and 5 1/2" casing to location. Check for proper size, type, and thread of casing.

Visually inspect casing and arrange on racks in order of running. Rope off and mark all casing not to be used. Count all joints. Strap casing as it is unloaded (THREADS OFF). Inspect casing and check all casing markings and threads for correctness. Inspect and clean threads, redope, and drift casing. Closely inspect any crossover joints and have back up crossover collars on location. PPO supervisor to oversee all casing inspections, drifting, strapping, etc. Casing to be hydro tested before leaving yard. Make sure there are a minimum of 2 marker joints in the string (on at KOP and one mid way through planned lateral

19. Drill curve and lateral section with XCD Polymer / Cut Brine / Starch System. Increase viscosity as needed using oil and LF-24 to help keep hole slick to TMD if needed. Mud program is a guide and hole conditions will dictate mud system requirements or changes. All mud additions will be coordinated through PPO representative. Drilling breaks and hole problems will be coordinated with drilling foreman and Engineer. Artesia and Houston offices will be advised daily or as needed.
20. Notify NMOCD of TD and cement job.
21. Pump high vis sweep and circulate hole clean.
22. Pull out of hole and record any tight spots on IADC report. SLM out of hole. Make sure cement crew will be on location and rigged up before casing is on bottom prior to starting out of hole. Keep hole full.
23. Rig up casing crew and run 5 1/2" casing per casing design. Fill casing every 10 joints and circulate casing at bottom of 9-5/8" casing and 1 joint off bottom. Run centralizers per design or as required by the NMOCD. Wash to bottom if necessary. Record any fill on IADC report.
24. Rig up cementers and test lines to 2000 psi. Have cement supervisor INDEPENDENTLY check cement volumes and displacement volumes. Collect and identify cement sample from each pod. Minimize out of hole time.

25. Circulate casing on bottom for 6 times casing volume minimum or until hole cleans up. While circulating hold final job meeting with cement company going over cement volumes, mixing water requirements, displacement volumes, pump pressure and rates, and contingency plans for unexpected events (i.e. plug does not bump at theoretical displacement volume etc.). Add 50% excess for cement volumes required. Don't over displace.
26. Pump 20 barrels fresh water spacer ahead and pump cement volume per cement design for 5 1/2" casing and PPO representative. Bump plug to 500 psi over pump pressure. Drop plug behind good cement. Chase plug with 10 bbls sugar water or as directed by Record cement to surface on IADC report.
27. Hang casing in minimum tension needed for pack off on wellhead. Close cement head for 8 hours.
28. WOC 8 hours before cutting off per BLM rules.
29. Nipple down BOP's and cut off casing and install 7" 10M x 11" 3M tubing head with 2 x 1-13/16" valves on one side and blind ca and BR plug on other side. Install with a blind flange and needle valve for completions.
30. Clean and jet pits. Release rig.
31. MAKE SURE LOCATION IS CLEAN BEFORE YOU LEAVE!!

REQUIREMENTS

1. All drill pipe and drill collars to be inspected by PPO representative and a total count of all joints on location.
2. Long string to be hydro tested before leaving yard.
3. Check all casing on location. Threads, size and weight.
4. All casing to be torqued to optimal torque.
5. All shoe tracks to be thread locked.
6. Mud Logger will tell what footage to catch samples.
7. Keep bit record and grade bits.
8. Check all float equipment for correct size and threads.
9. Sign and keep copies of field tickets to turn in to office.
10. Notify all State and Federal offices of events and record in morning report. (Date / Time / Name Of Person Talked To).
11. Check and make sure all bond coating and centralizers are in proper places.
12. PPO supervisor to be sure all casing tallies are correctly done.
13. PPO supervisor to check and ensure drill pipe tally is correct.
14. Record release dates of equipment on location.
15. Pre job safety meeting with all companies before job begins.
16. On rig floor when picking up BHA and making up float equipment.
17. Witness all testing and cement jobs.
18. Make sure that everything that is reported on IADC is correct.
19. Make sure all mud is correctly mixed by rig crews.
20. All accidents to be reported to office ASAP and a accident form sent in to office within 24 hours.
21. All trash is off location and lease road is clean at all times.
22. All records are kept as TIGHT HOLE and are not released.
23. Well record is sealed and sent to Artesia Office or is delivered to PPO supervisor to Artesia Office.

VENDOR LIST

| <u>COMPANY</u> | <u>SERVICE</u> | <u>CONTACT NAME</u> | <u>CONTACT NUMBER</u> |
|-----------------------|-----------------------|----------------------------|------------------------------|
| TBD | Drilling Rig | | |
| TBD | Directional Company | | |

| | |
|-----|---------------------------|
| TBD | Mud |
| TBD | Cement |
| NA | DST |
| TBD | PVT's & Rig Monitor |
| TBD | Mud Logging |
| TBD | Conductor |
| TBD | Closed Loop System |
| TBD | Casing Crew & LD Machine |
| TBD | Location & Road |
| TBD | Stabilizers |
| TBD | Float Equipment |
| TBD | Open Hole Logging |
| TBD | H2S Equipment |
| TBD | Location & Trash Trailers |
| TBD | Living Quarters |
| TBD | Welder |
| TBD | Forklift & Trucking |
| TBD | Water |
| TBD | Rotating Head |

PERSONNEL LIST

TBD, Drilling Foreman

Cell

Lelan J Anders, Engineering/Operations

Office 713-429-1291

Cell 281-908-1752

C.J. Lipinski, Geology

Office 713-429-5282

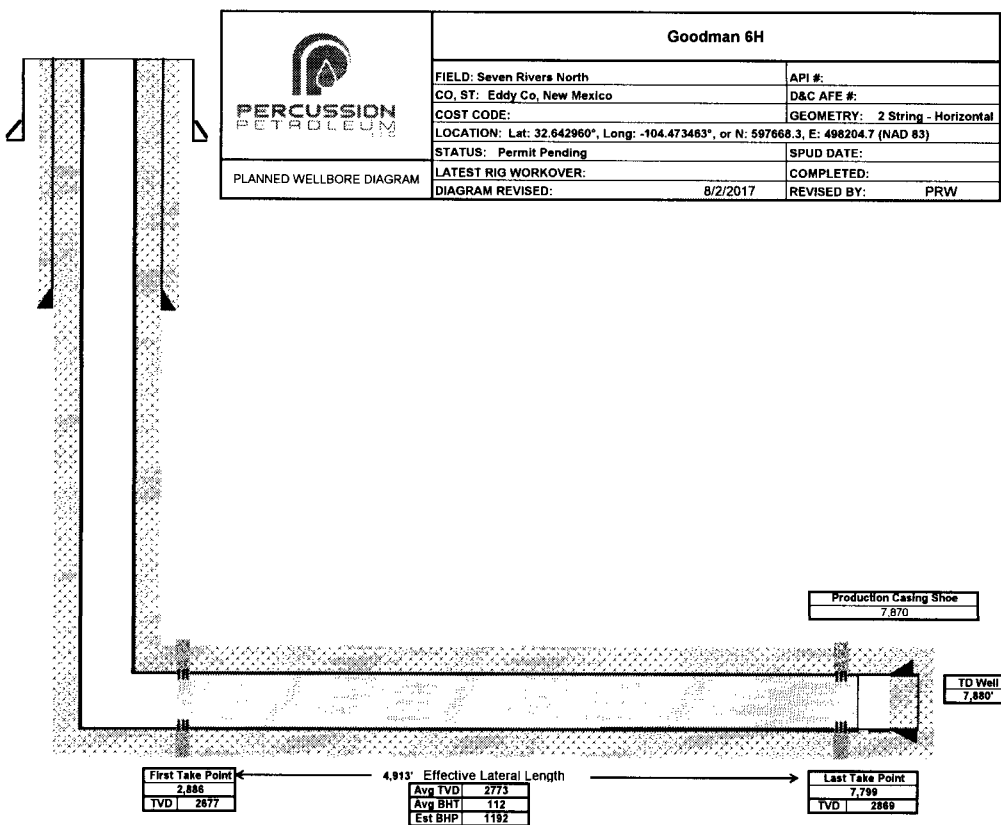
Cell 262-894-2811

Josh Grisham, Land

Office 713-589-2337

Cell 979-417-6858

| Depth | Hole Size | Casing Data | Lithology | Fluid | Cement |
|--------|-----------|---------------------|--|---|---------------------------|
| 90' | | 20" 94# H-40 | | 8.4 ppg FW Gel and Gel/LCM Sweeps | Ready-Mix @ Surface |
| 1,213' | 12 1/4 | 9 5/8" 36# J-55 STC | San Andres Top @ 813' | 8.3-9.2 ppg FW Cut Brine Gel Sweeps and LCM Pills as needed | TOC @ Surface 100% Excess |
| 7,890' | 8 3/4 | 5 1/2" 17# L-80 BTC | Glorieta Top @ 2,438' TVD Yeso Top @ 2,574' TVD | 8.3-9.2 ppg FW Cut Brine Gel Sweeps and LCM Pills as needed (only acid soluble LCM) | TOC @ Surface 50% Excess |





PERCUSSION
PETROLEUM
LLC

Percussion Petroleum, LLC

Eddy County, NM

Goodman 22

6H

OH

Plan: Plan #4

Standard Planning Report

28 July, 2017

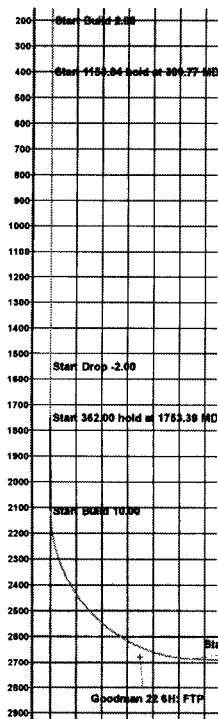




Company: Percussion Petroleum, LLC
Project: Eddy County, NM
Site: Goodman 22
Well: 6H
Wellbore: OH
Rig: NA
Design: Plan #4 / 9:08, July 28 2017



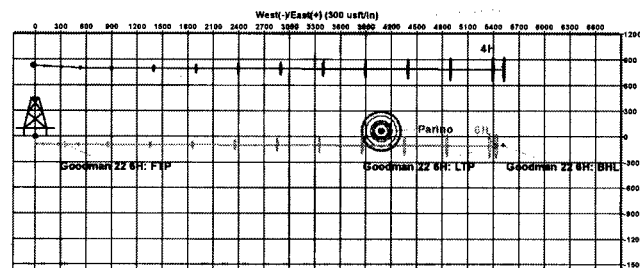
PROJECT DETAILS Eddy County, NM
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level



TOTAL CORRECTION
Magnetic North is 7.47° East of Grid North (Magnetic Convergence)

| WELL DETAILS: 6H | | | | | | |
|---------------------------|---------|-----------|-----------|-----------|-------------|---------|
| RKB=25' @ 3483.00usR (NA) | | | | | | |
| 3458.00 | | | | | | |
| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | |
| 0.00 | 0.00 | 597668.30 | 498204.70 | 32.642980 | -104.473463 | |
| SECTION DETAILS | | | | | | |
| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W |
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 |
| 3 | 399.77 | 4.00 | 180.00 | 399.81 | -6.96 | 0.00 |
| 4 | 1555.81 | 4.00 | 180.00 | 1550.84 | -87.36 | 0.00 |
| 5 | 1753.39 | 0.00 | 0.00 | 1750.26 | -94.32 | 0.00 |
| 6 | 2116.39 | 0.00 | 0.00 | 2112.26 | -94.32 | 0.00 |
| 7 | 2893.78 | 87.84 | 90.16 | 2684.81 | -85.86 | 851.36 |
| 8 | 7880.81 | 87.84 | 90.16 | 2869.00 | -109.50 | 5434.90 |

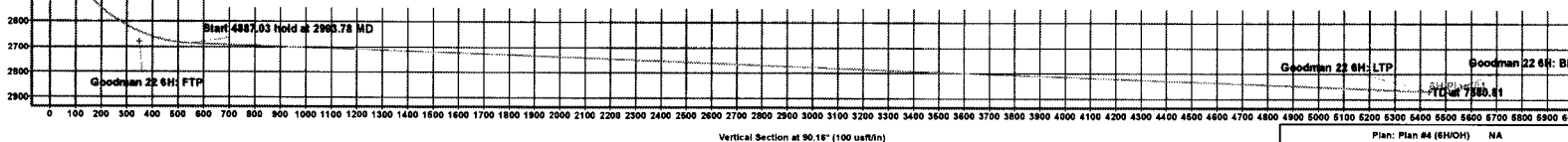
Azimuths to Grid North
True North: 0.08°
Magnetic North: 7.47°
Magnetic Field
Strength: 48080.6nT
Dip Angle: 60.30°
Date: 7/14/2017
Model: IGRF2015



WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

| Name | TVD | +N/-S | +E/-W | Northing | Easting | Shape |
|--------------------|---------|---------|---------|-----------|-----------|-------|
| Goodman 22 6H: FTP | 2577.00 | -65.50 | 347.90 | 697672.80 | 498552.50 | Point |
| Goodman 22 6H: LTP | 2869.00 | -109.50 | 5434.90 | 697568.80 | 503839.80 | Point |
| Goodman 22 6H: BHL | 2872.02 | -107.20 | 5514.90 | 697561.10 | 503719.60 | Point |

Disclaimer:
All data herein is provided
as-is and without warranty.
The user assumes all
responsibility for the use
of this information and
its accuracy.



Vertical Section at 90.16° (100 usR/in)

Plan: Plan #4 (SHOH) NA
Created By: Daniel Benn Date: 9:08, July 28 2017

Database: WBDS_SQL_2
Company: Percussion Petroleum, LLC
Project: Eddy County, NM
Site: Goodman 22
Well: 6H
Wellbore: OH
Design: Plan #4

Local Co-ordinate Reference: Well 6H
TVD Reference: RKB=25' @ 3483.00usft (NA)
MD Reference: RKB=25' @ 3483.00usft (NA)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

| | | | |
|--------------------|---------------------------|----------------------|----------------|
| Project | Eddy County, NM | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | New Mexico Eastern Zone | | |

| | | | | | | |
|-----------------------|----------|------------|-----------------|------------|-------------------|---------|
| Site | | Goodman 22 | | | | |
| Site Position: | | Northing: | 601,029.41 usft | Latitude: | 32.652199 | |
| From: | Lat/Long | Easting: | 498,211.10 usft | Longitude: | -104.473457 | |
| Position Uncertainty: | | 0.00 usft | Slot Radius: | 13.200 in | Grid Convergence: | -0.08 ° |

| | | | | | | |
|----------------------|-----------|----------------|---------------------|-----------------|---------------|---------------|
| Well | 6H | | | | | |
| Well Position | +N/-S | -3,361.11 usft | Northing: | 597,668.30 usft | Latitude: | 32.642960 |
| | +E/-W | -6.40 usft | Easting: | 498,204.70 usft | Longitude: | -104.473464 |
| Position Uncertainty | 0.00 usft | | Wellhead Elevation: | | Ground Level: | 3,458.00 usft |

| | | | | | |
|-----------|------------|-------------|--------------------|------------------|------------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 7/14/2017 | 7.39 | 60.30 | 48,080.64377484 |

| | | | | |
|-------------------|----------------------------|-----------------|-----------------|------------------|
| Design | Plan #4 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 0.00 | 0.00 | 0.00 | 90.16 |

| Plan Survey Tool Program | | | Date | 7/28/2017 | |
|--------------------------|--------------------|-------------------|--------------|-----------|-----------------------|
| Depth From (usft) | Depth To (usft) | Survey (Wellbore) | Tool Name | Remarks | |
| 1 | 0.00 | 7,880.26 | Plan #4 (OH) | MWD+IGRF | OWSG MWD + IGRF or WA |
| | | | | | |

| Plan Sections | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-----------------------|----------------------|---------------------|---------|------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 399.77 | 4.00 | 180.00 | 399.61 | -6.96 | 0.00 | 2.00 | 2.00 | 0.00 | 180.00 | |
| 1,553.61 | 4.00 | 180.00 | 1,550.64 | -87.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,753.39 | 0.00 | 0.00 | 1,750.26 | -94.32 | 0.00 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 2,115.39 | 0.00 | 0.00 | 2,112.26 | -94.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2,993.78 | 87.84 | 90.16 | 2,684.81 | -95.86 | 551.36 | 10.00 | 10.00 | 0.00 | 0.00 | |
| 7,880.81 | 87.84 | 90.16 | 2,869.00 | -109.50 | 5,434.90 | 0.00 | 0.00 | 0.00 | 0.00 | Goodman 22 6H: L |

Database: WBDS_SQL_2
Company: Percussion Petroleum, LLC
Project: Eddy County, NM
Site: Goodman 22
Well: 6H
Wellbore: OH
Design: Plan #4

Local Co-ordinate Reference: Well 6H
TVD Reference: RKB=25' @ 3483.00usft (NA)
MD Reference: RKB=25' @ 3483.00usft (NA)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-----------------------|----------------------|---------------------|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 300.00 | 2.00 | 180.00 | 299.98 | -1.75 | 0.00 | 0.00 | 2.00 | 2.00 | 0.00 |
| 399.77 | 4.00 | 180.00 | 399.61 | -6.96 | 0.00 | 0.02 | 2.00 | 2.00 | 0.00 |
| 500.00 | 4.00 | 180.00 | 499.59 | -13.95 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 600.00 | 4.00 | 180.00 | 599.35 | -20.91 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 |
| 700.00 | 4.00 | 180.00 | 699.11 | -27.88 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 |
| 800.00 | 4.00 | 180.00 | 798.87 | -34.85 | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 |
| 900.00 | 4.00 | 180.00 | 898.62 | -41.82 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 |
| 1,000.00 | 4.00 | 180.00 | 998.38 | -48.79 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| 1,100.00 | 4.00 | 180.00 | 1,098.14 | -55.75 | 0.00 | 0.16 | 0.00 | 0.00 | 0.00 |
| 1,200.00 | 4.00 | 180.00 | 1,197.89 | -62.72 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 |
| 1,300.00 | 4.00 | 180.00 | 1,297.65 | -69.69 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 |
| 1,400.00 | 4.00 | 180.00 | 1,397.41 | -76.66 | 0.00 | 0.22 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | 4.00 | 180.00 | 1,497.16 | -83.62 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 |
| 1,553.61 | 4.00 | 180.00 | 1,550.64 | -87.36 | 0.00 | 0.25 | 0.00 | 0.00 | 0.00 |
| 1,600.00 | 3.07 | 180.00 | 1,596.95 | -90.22 | 0.00 | 0.25 | 2.00 | -2.00 | 0.00 |
| 1,700.00 | 1.07 | 180.00 | 1,696.87 | -93.83 | 0.00 | 0.26 | 2.00 | -2.00 | 0.00 |
| 1,753.39 | 0.00 | 0.00 | 1,750.26 | -94.32 | 0.00 | 0.27 | 2.00 | -2.00 | 0.00 |
| 1,800.00 | 0.00 | 0.00 | 1,796.87 | -94.32 | 0.00 | 0.27 | 0.00 | 0.00 | 0.00 |
| 1,900.00 | 0.00 | 0.00 | 1,896.87 | -94.32 | 0.00 | 0.27 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 0.00 | 0.00 | 1,996.87 | -94.32 | 0.00 | 0.27 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 0.00 | 0.00 | 2,096.87 | -94.32 | 0.00 | 0.27 | 0.00 | 0.00 | 0.00 |
| 2,115.39 | 0.00 | 0.00 | 2,112.26 | -94.32 | 0.00 | 0.27 | 0.00 | 0.00 | 0.00 |
| 2,150.00 | 3.46 | 90.16 | 2,146.85 | -94.33 | 1.05 | 1.31 | 10.00 | 10.00 | 0.00 |
| 2,200.00 | 8.46 | 90.16 | 2,196.56 | -94.34 | 6.24 | 6.50 | 10.00 | 10.00 | 0.00 |
| 2,250.00 | 13.46 | 90.16 | 2,245.64 | -94.37 | 15.74 | 16.01 | 10.00 | 10.00 | 0.00 |
| 2,300.00 | 18.46 | 90.16 | 2,293.69 | -94.41 | 29.49 | 29.75 | 10.00 | 10.00 | 0.00 |
| 2,350.00 | 23.46 | 90.16 | 2,340.37 | -94.46 | 47.37 | 47.63 | 10.00 | 10.00 | 0.00 |
| 2,400.00 | 28.46 | 90.16 | 2,385.31 | -94.52 | 69.25 | 69.51 | 10.00 | 10.00 | 0.00 |
| 2,450.00 | 33.46 | 90.16 | 2,428.17 | -94.59 | 94.97 | 95.23 | 10.00 | 10.00 | 0.00 |
| 2,500.00 | 38.46 | 90.16 | 2,468.63 | -94.67 | 124.32 | 124.58 | 10.00 | 10.00 | 0.00 |
| 2,550.00 | 43.46 | 90.16 | 2,506.38 | -94.76 | 157.09 | 157.35 | 10.00 | 10.00 | 0.00 |
| 2,600.00 | 48.46 | 90.16 | 2,541.12 | -94.86 | 193.02 | 193.28 | 10.00 | 10.00 | 0.00 |
| 2,650.00 | 53.46 | 90.16 | 2,572.60 | -94.97 | 231.84 | 232.11 | 10.00 | 10.00 | 0.00 |
| 2,700.00 | 58.46 | 90.16 | 2,600.58 | -95.09 | 273.26 | 273.53 | 10.00 | 10.00 | 0.00 |
| 2,750.00 | 63.46 | 90.16 | 2,624.84 | -95.21 | 316.96 | 317.23 | 10.00 | 10.00 | 0.00 |
| 2,800.00 | 68.46 | 90.16 | 2,645.21 | -95.34 | 362.61 | 362.88 | 10.00 | 10.00 | 0.00 |
| 2,850.00 | 73.46 | 90.16 | 2,661.51 | -95.47 | 409.86 | 410.13 | 10.00 | 10.00 | 0.00 |
| 2,900.00 | 78.46 | 90.16 | 2,673.64 | -95.60 | 458.35 | 458.62 | 10.00 | 10.00 | 0.00 |
| 2,950.00 | 83.46 | 90.16 | 2,681.49 | -95.74 | 507.71 | 507.98 | 10.00 | 10.00 | 0.00 |
| 2,993.78 | 87.84 | 90.16 | 2,684.81 | -95.86 | 551.36 | 551.63 | 10.00 | 10.00 | 0.00 |
| 3,000.00 | 87.84 | 90.16 | 2,685.04 | -95.88 | 557.57 | 557.84 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 87.84 | 90.16 | 2,688.81 | -96.16 | 657.50 | 657.77 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 87.84 | 90.16 | 2,692.58 | -96.44 | 757.43 | 757.70 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 87.84 | 90.16 | 2,696.35 | -96.72 | 857.36 | 857.63 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 87.84 | 90.16 | 2,700.12 | -97.00 | 957.29 | 957.55 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 87.84 | 90.16 | 2,703.89 | -97.28 | 1,057.22 | 1,057.48 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 87.84 | 90.16 | 2,707.66 | -97.55 | 1,157.14 | 1,157.41 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 87.84 | 90.16 | 2,711.42 | -97.83 | 1,257.07 | 1,257.34 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 87.84 | 90.16 | 2,715.19 | -98.11 | 1,357.00 | 1,357.27 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 87.84 | 90.16 | 2,718.96 | -98.39 | 1,456.93 | 1,457.20 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 87.84 | 90.16 | 2,722.73 | -98.67 | 1,556.86 | 1,557.13 | 0.00 | 0.00 | 0.00 |

Database: WBDS_SQL_2
Company: Percussion Petroleum, LLC
Project: Eddy County, NM
Site: Goodman 22
Well: 6H
Wellbore: OH
Design: Plan #4

Local Co-ordinate Reference: Well 6H
TVD Reference: RKB=25' @ 3483.00usft (NA)
MD Reference: RKB=25' @ 3483.00usft (NA)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|-----------------------------|----------------------------|---------------------------|
| 4,100.00 | 87.84 | 90.16 | 2,726.50 | -98.95 | 1,656.79 | 1,657.06 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 87.84 | 90.16 | 2,730.27 | -99.23 | 1,756.72 | 1,756.99 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 87.84 | 90.16 | 2,734.04 | -99.51 | 1,856.64 | 1,856.92 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 87.84 | 90.16 | 2,737.81 | -99.79 | 1,956.57 | 1,956.84 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 87.84 | 90.16 | 2,741.58 | -100.07 | 2,056.50 | 2,056.77 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 87.84 | 90.16 | 2,745.35 | -100.34 | 2,156.43 | 2,156.70 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 87.84 | 90.16 | 2,749.11 | -100.62 | 2,256.36 | 2,256.63 | 0.00 | 0.00 | 0.00 |
| 4,800.00 | 87.84 | 90.16 | 2,752.88 | -100.90 | 2,356.29 | 2,356.56 | 0.00 | 0.00 | 0.00 |
| 4,900.00 | 87.84 | 90.16 | 2,756.65 | -101.18 | 2,456.22 | 2,456.49 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 87.84 | 90.16 | 2,760.42 | -101.46 | 2,556.14 | 2,556.42 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 87.84 | 90.16 | 2,764.19 | -101.74 | 2,656.07 | 2,656.35 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 87.84 | 90.16 | 2,767.96 | -102.02 | 2,756.00 | 2,756.28 | 0.00 | 0.00 | 0.00 |
| 5,300.00 | 87.84 | 90.16 | 2,771.73 | -102.30 | 2,855.93 | 2,856.20 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 87.84 | 90.16 | 2,775.50 | -102.58 | 2,955.86 | 2,956.13 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 87.84 | 90.16 | 2,779.27 | -102.86 | 3,055.79 | 3,056.06 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 87.84 | 90.16 | 2,783.04 | -103.14 | 3,155.72 | 3,155.99 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 87.84 | 90.16 | 2,786.80 | -103.41 | 3,255.64 | 3,255.92 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 87.84 | 90.16 | 2,790.57 | -103.69 | 3,355.57 | 3,355.85 | 0.00 | 0.00 | 0.00 |
| 5,900.00 | 87.84 | 90.16 | 2,794.34 | -103.97 | 3,455.50 | 3,455.78 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 87.84 | 90.16 | 2,798.11 | -104.25 | 3,555.43 | 3,555.71 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 87.84 | 90.16 | 2,801.88 | -104.53 | 3,655.36 | 3,655.64 | 0.00 | 0.00 | 0.00 |
| 6,200.00 | 87.84 | 90.16 | 2,805.65 | -104.81 | 3,755.29 | 3,755.57 | 0.00 | 0.00 | 0.00 |
| 6,300.00 | 87.84 | 90.16 | 2,809.42 | -105.09 | 3,855.22 | 3,855.49 | 0.00 | 0.00 | 0.00 |
| 6,400.00 | 87.84 | 90.16 | 2,813.19 | -105.37 | 3,955.14 | 3,955.42 | 0.00 | 0.00 | 0.00 |
| 6,500.00 | 87.84 | 90.16 | 2,816.96 | -105.65 | 4,055.07 | 4,055.35 | 0.00 | 0.00 | 0.00 |
| 6,600.00 | 87.84 | 90.16 | 2,820.73 | -105.93 | 4,155.00 | 4,155.28 | 0.00 | 0.00 | 0.00 |
| 6,700.00 | 87.84 | 90.16 | 2,824.49 | -106.20 | 4,254.93 | 4,255.21 | 0.00 | 0.00 | 0.00 |
| 6,800.00 | 87.84 | 90.16 | 2,828.26 | -106.48 | 4,354.86 | 4,355.14 | 0.00 | 0.00 | 0.00 |
| 6,900.00 | 87.84 | 90.16 | 2,832.03 | -106.76 | 4,454.79 | 4,455.07 | 0.00 | 0.00 | 0.00 |
| 7,000.00 | 87.84 | 90.16 | 2,835.80 | -107.04 | 4,554.72 | 4,555.00 | 0.00 | 0.00 | 0.00 |
| 7,100.00 | 87.84 | 90.16 | 2,839.57 | -107.32 | 4,654.64 | 4,654.93 | 0.00 | 0.00 | 0.00 |
| 7,200.00 | 87.84 | 90.16 | 2,843.34 | -107.60 | 4,754.57 | 4,754.85 | 0.00 | 0.00 | 0.00 |
| 7,300.00 | 87.84 | 90.16 | 2,847.11 | -107.88 | 4,854.50 | 4,854.78 | 0.00 | 0.00 | 0.00 |
| 7,400.00 | 87.84 | 90.16 | 2,850.88 | -108.16 | 4,954.43 | 4,954.71 | 0.00 | 0.00 | 0.00 |
| 7,500.00 | 87.84 | 90.16 | 2,854.65 | -108.44 | 5,054.36 | 5,054.64 | 0.00 | 0.00 | 0.00 |
| 7,600.00 | 87.84 | 90.16 | 2,858.42 | -108.72 | 5,154.29 | 5,154.57 | 0.00 | 0.00 | 0.00 |
| 7,700.00 | 87.84 | 90.16 | 2,862.19 | -109.00 | 5,254.22 | 5,254.50 | 0.00 | 0.00 | 0.00 |
| 7,800.00 | 87.84 | 90.16 | 2,865.95 | -109.27 | 5,354.14 | 5,354.43 | 0.00 | 0.00 | 0.00 |
| 7,880.81 | 87.84 | 90.16 | 2,869.00 | -109.50 | 5,434.90 | 5,435.18 | 0.00 | 0.00 | 0.00 |

Database: WBDS_SQL_2
Company: Percussion Petroleum, LLC
Project: Eddy County, NM
Site: Goodman 22
Well: 6H
Wellbore: OH
Design: Plan #4

Local Co-ordinate Reference: Well 6H
TVD Reference: RKB=25' @ 3483.00usft (NA)
MD Reference: RKB=25' @ 3483.00usft (NA)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Design Targets

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
|---|------------------|-----------------|---------------|-----------------|-----------------|--------------------|-------------------|-----------|-------------|
| Goodman 22 6H: FTP - plan misses target center by 35.01usft at 2799.52usft MD (2645.03 TVD, -95.33 N, 362.16 E) - Point | 0.00 | 360.00 | 2,677.00 | -95.50 | 347.90 | 597,572.80 | 498,552.60 | 32.642699 | -104.472333 |
| Goodman 22 6H: LTP - plan hits target center - Point | 0.00 | 360.00 | 2,869.00 | -109.50 | 5,434.90 | 597,558.80 | 503,639.60 | 32.642678 | -104.455806 |
| Goodman 22 6H: BHL - plan misses target center by 80.09usft at 7880.81usft MD (2869.00 TVD, -109.50 N, 5434.90 E) - Point | 0.00 | 360.00 | 2,872.02 | -107.20 | 5,514.90 | 597,561.10 | 503,719.60 | 32.642684 | -104.455546 |

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION

PERMIT CONDITIONS OF APPROVAL

Operator Name Percussion
API Number 30-015-44365
Well Name and Number Goodman 22 #6H

- ☒ Will require a Directional Survey and "As Drilled" C-102 with the C-104
- ☒ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.
- ☒ If cement does not circulate to surface, must run temperature survey or other log to determine top of cement.
- ☐ NSL approval required prior to sale of product
- ☐ NSP approval required for requested acreage dedication
- ☐ Initial injection cannot commence until all regulatory requirements have been met and drilling and completion data conforms to approved SWD order