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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Permit 347624

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

1. Operator Name and Address Targa Northern Delaware, LLC 811 Louisiana, Suite 2100 Houston, TX 77002		2. OGRID Number 331548 3. API Number 30-025-51970
4. Property Code 333568	5. Property Name Red Hills AGI	6. Well No. 003

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	13	24S	33E		3116	N	1159	E	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	13	24S	33E	I	3116	N	1159	E	Lea

9. Pool Information

AGI;DELAWARE	98335

Additional Well Information

11. Work Type New Well	12. Well Type Injection	13. Cable/Rotary Rotary	14. Lease Type Private	15. Ground Level Elevation 3579
16. Multiple N	17. Proposed Depth 7600	18. Formation Cherry Canyon	19. Contractor	20. Spud Date 9/1/2023
Depth to Ground water 390'		Distance from nearest fresh water well 0.23 mi.		Distance to nearest surface water N/A

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

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	72	1307	745	0
Int1	12.25	9.625	47	5230	1145	0
Prod	8.5	7	32	7600	650	0

Casing/Cement Program: Additional Comments

In addition to Production cement above, 9 bbl Well Lock Resin will be placed above injection interval, from 5280' to 5580'.
Corrosion resistant cement will be used across production interval. See attached Drilling Program.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	3000	3000	
Double Ram	5000	5000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify I have complied with 19.15.14.9 (A) NMAC ☑ and/or 19.15.14.9 (B) NMAC ☑, if applicable.** Signature: Matt Eales	**OIL CONSERVATION DIVISION**
Printed Name: Matt Eales	Approved By: P Kautz
Title: VP of Regulatory	Title:
Email Address: meales@targaresources.com	Approved Date: 09/08/2023 Expiration Date: 09/08/2025
Date: 08-18-23 Phone: 7513	Conditions of Approval Attached

Perrin L
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
Ohuid il
811 S. First St, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575)748-9720
District HL
1000 Rio Brazos Road, Aztec, NM 874(0
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. Si. Francis Dr., Santa Fc, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-51970	98335	AGI; DELAWARE

4 Property Code	5 Property Name	'Well Number
333568	RED HILLS AGI	3

'OGRID No.	Operator Name	9 Elevation
331548	TARGA NORTHERN DELAWARE, LLC	3578.97'

W Surface lvocation

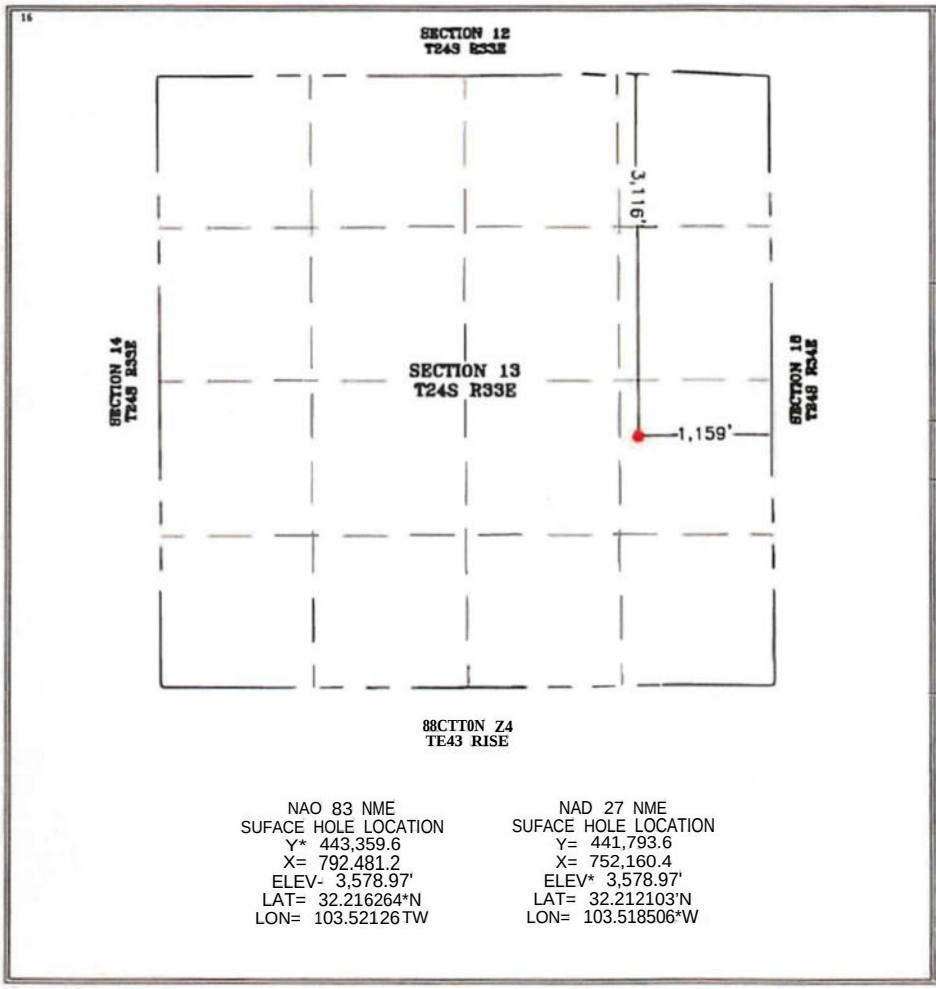
UL or lot no.	Sectiou	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	13	24 S	33 E		3116	NORTH	1159	EAST	LEA

" Bottom Ho le Location If Different From Surface

ULor lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Une	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
			R-22843

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.



NAO 83 NME
SUFACE HOLE LOCATION
Y* 443,359.6
X= 792.481.2
ELEV- 3,578.97'
LAT= 32.216264*N
LON= 103.52126TW

NAD 27 NME
SUFACE HOLE LOCATION
Y= 441,793.6
X= 752,160.4
ELEV* 3,578.97'
LAT= 32.212103'N
LON= 103.518506*W

''OPERATOR CERTIFICATION

J hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organisation either owns a working interest or unleased mineral interest in the land including the pivposed 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 pouting order heretofore entered by the division

Matt Eale 6-7-^?
Signature Dee

Matt Ealer
Printed Nome

matt.ealer@targaresources.com
E-mail Address

"SURVEYOR CERTIFICATION

/ 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.

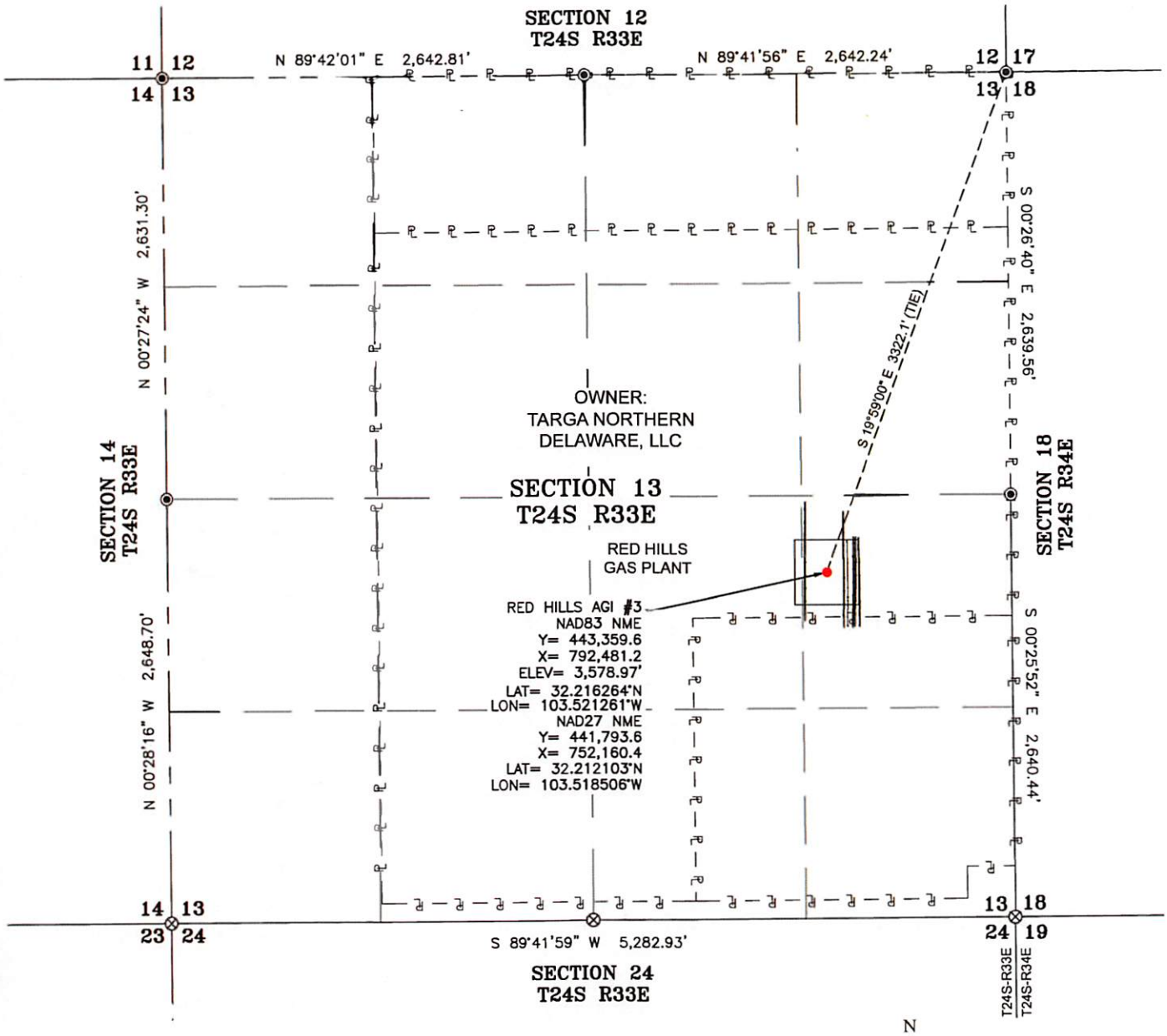
5/9/23
Date of Survey

Signature and Seal of Professional Surveyor:

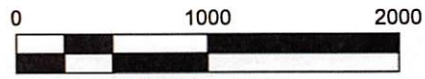
STANLEY W. DRANNON
STATE OF NEW MEXICO
NO. 23002
REGISTERED PROFESSIONAL SURVEYOR

STANLEY W. DRANNON 23002
Certificate Number ALT TAR-028

SECTION 13, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO



RED HILLS SE WELL
SECTION LINE DISTANCE
SHL 3116' FNL & 1159' FEL



1" = 1,000 FEET

○ BEGIN, END OR ANGLE POINT
◉ FOUND USGLO BRASS CAP
◒ CALCULATED CORNER
—℄—℄— PROPERTY LINE
——— SECTION LINE

I, Stanley W. Drannon, New Mexico PLS No. 23002, hereby certify this survey made on the ground under my supervision. This survey meet the minimum standards for surveying in New Mexico.

5/9/23
STANLEY W. DRANNON Date
NEW MEXICO R.P.L.S. NO. 23002

NOTES:
1. BEARINGS AND DISTANCES CONFORM TO THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD83, IN U.S. SURVEY FEET.

DRAWN BY: ALT	SCALE: 1" = 1000'
CHECKED: JS	W.O. No.: TAR-028
DATE: 5/9/23	
AFE:	
REV:	

WELL LOCATION PLAT
RED HILLS AGI #3

PROSPECT SURVEYING
9231 BOAT CLUB ROAD, FORT WORTH TX 76179
PH: 817-999-7385 FIRM NO. 10194267

TARGA

Drilling Program

Targa Resources – Red Hills AGI #3
Sec 13, T24S, R33E
Lea County, New Mexico

WELLBORE SCHEMATIC
Targa Resources
Red Hills Delaware AGI #3
3116' FNL & 1159' FEL
Sec 13, Twp 24S, Rge 33E
GL 3578', RKB TBD

Surface - (Conventional)

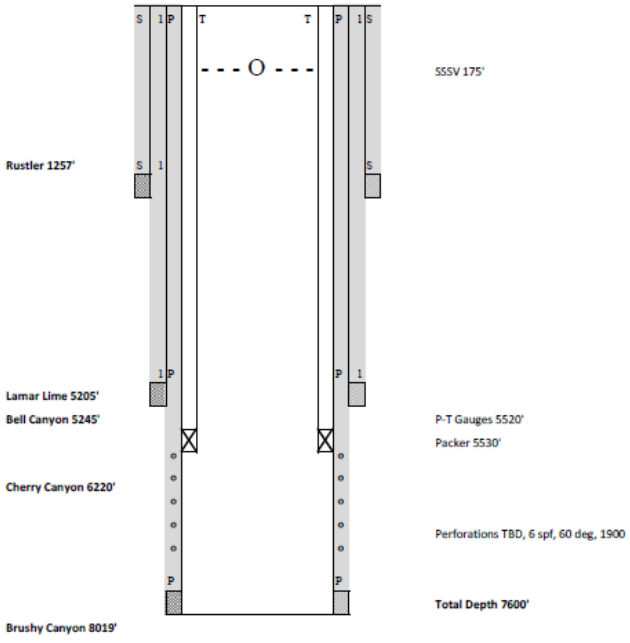
Hole Size:	17.5"
Casing:	13.375" 72# H-40 BTC
Depth Top:	Surface
Depth Btm:	1307'
Cement:	745 sks Class C + Additives (plus excess)
Cement Top:	Surface - (Circulate)

Intermediate #1 - (Conventional)

Hole Size:	12.25"
Casing:	9.625" 47# L-80 BTC
Depth Top:	Surface
Depth Btm:	5230'
Cement:	1145 sks Class C + Additives (plus excess)
Cement Top:	Surface - (Circulate)

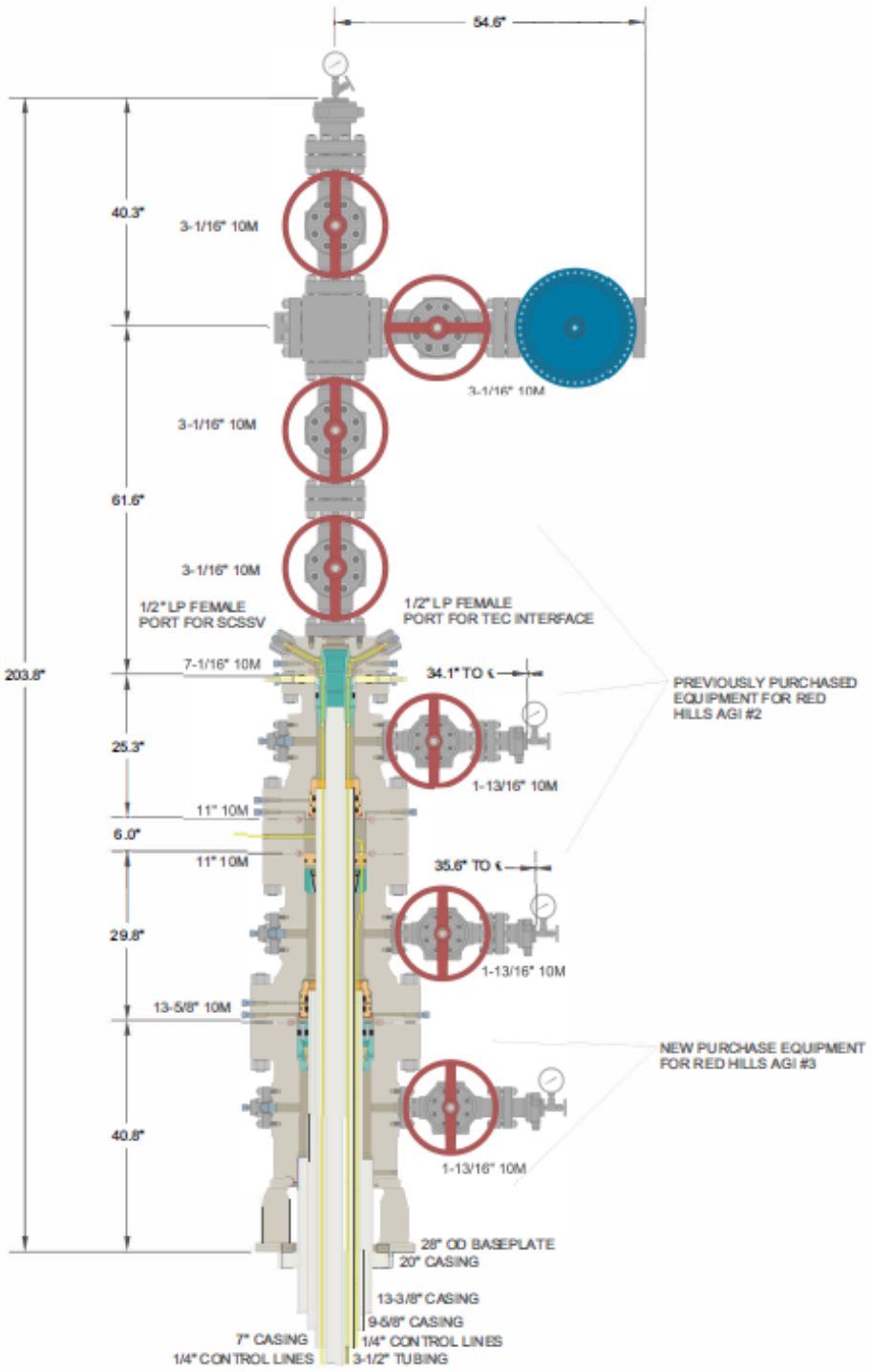
Production - (Conventional)

Tubing Depth:	8.5"
Casing 1:	7" 32# L-80 BTC
Depths:	0' to 5280' & 5580' to 7600'
Casing 2:	7" 32# G3 CRA VAMTOP
Depths:	5280'-5580'
Cement:	650 sks Class C + Add (plus excess) 9 bbl Well Lock resin 5280'-5580'
DV-ECP Tools:	5280' & 5580'



Tubing

Depth:	5530'
Tubing:	3.5" 9.3# G3 CRA VAMACE
Packer:	7" x 3.5" PermaPak or equivalent (Inconel)
SSSV:	175'
PT Gauges:	5520'
Packer Fluid:	Diesel + Additives



VAULT PRESSURE CONTROL

Pressure Control

20 X 13-3/8 X 9-5/8 X 7 X 3-1/2 10M CONVENTIONAL WELLHEAD
ASSEMBLY, WITH T-EBS-F TUBING HEAD,
T-M40-CCL TUBING HANGER AND M40-CCL ADAPTER FLANGE
WITH DSA-CCL ASSEMBLY

DRAWN BY:	AH	DRAWING NO.:	1001668
REVIEWED BY:		Rev. E	Sht. 1 of 1
APPROVED BY:		DATE:	6/8/23

Location Preparation

Pad Construction: Pad to be pre-built by Targa.

Road & Signage Install T-post fence along road into location to prevent entry to existing gas plant. Ensure road is wide enough to allow truck traffic to pass in opposite directions, and that corners are large enough to allow semi-truck traffic to negotiate corner (approx. 30' wide road, and angled on inside of corners). Install signage to direct traffic. Install well and location signage as per regulations.

Fluid Storage: Install 60' x 100' liner w/ berms in SW corner of location as per location diagram. Move in 8 fluid storage frac tanks on top of liner, manifold to East. Manifold tanks together into 2 groups of 4 tanks each. Fill assembled manifolds with fresh water to check for leaks.

Cellar & Conductor: 10' dia x 10' Deep tinhorn cellar. Drill & set 20" conductor @ 100' (or until hit redbed).

Conductor Hole size: 30"

Depth: 100'

Mud: Fresh water native mud.

Casing: From 0' to 100' – (20" CSG)

Run 20" casing with open shoe.

Cement: Class A Ready Mix

Fill annulus down backside from TD to surface. Cut off casing 6" above cellar floor. Leave remnant on location for use as drilling riser.

Wellhead: Weld on **Capping Plate**

Critical Vendors:

Vendor	Contact	Phone	Cell	Item
TBD				

MIRU Drilling Rig

Drilling Rig: MIRU TBD drilling rig. Confirm receipt of DP/DC/XO inspection reports to DS-1 Cat 4 standard. Confirm all DP G-105 grade or better. Confirm starting DP & DC count.

Housing: MIRU housing, sewer and water for company man, directional, mud & solids control personnel, and mud lab. Leave sufficient room to MIRU mud logger trailer at later date.

Fluids & Transfer: MIRU rental 4" transfer pump to be located on corner of liner. Build qty. 2, 4" poly lines w/ 4" Fig 100 hammer unions and bury 12" deep from edge of lined pad at transfer pump location to south end of rig mud pits. MIRU cement water frac tanks and manifold together. Fill cement water tanks with city fresh water. Fill fluid storage frac tanks 1 & 2 w/ fresh water. Fill pits with fresh water and circulate system to check for leaks.

Solids Control: MIRU solids control equipment & cuttings bins.

Mud: Deliver fresh mud products to location as per mud program.

Critical Vendors:

Vendor	Contact	Phone	Cell	Item
TBD				

Surface Hole

Hole size: **17 ½"**

Depth: **1307'**

Mud: Refer to attached mud program. Fresh water native spud mud. Need 28 to 36 visc. (mud weight not to exceed 9.4 ppg).

BHA:

1	17 ½" Bit
1	8" Bit Sub
1	8" DC
1	8" Shock sub
1	8" Directional survey tool
1	17 ¼" 4 blade stabilizer
11	8" DC
1	XO
21	6 ½" DC
1	XO

Shaker Screens: 120's

Tubulars:

Item type	Casing	Drill Pipe
Size	13 ⅜"	5"
Weight (#/ft)	72	19.5
Grade	L-80	G-105
Thread	BTC	4 1/2 IF
ID (in)	12.347	4.276 (2.750 conn)
Burst (psi)	5380	
Collapse (psi)	2670	
Tension (klbs)	1661	
Min MU Torque (ft-lb)		
Rec. Torque (ft-lb)	To Diamond	
Max MU Torque (ft-lb)		

Drilling: Weld 20" drilling conductor with flow nipple onto the 20" conductor pipe at surface. **Notify NMOCD prior to spudding well *and* in sufficient time to witness cementing of surface casing.** Run 17 ½" bit, BHA w/ survey tool and 5" DP to casing point. **Deviation not to exceed 3˚**. Seepage should be controllable with LCM sweeps. After drilling to 1307', pump heavy LCM sweep and circulate hole clean. TOOH. Run OH logs (GR-CAL-IND RES).

Casing: From 0' to 1307' – (13 ⅜" 72# L80 BTC CSG)

Fill casing with drilling fluid as needed. Run 13 ⅜" float shoe, 1 jt 13 ⅜" 72# L80 BTC casing, and 13 ⅜" float collar. Weld float shoe, float collar, and thread-lock next 2 jts. Run remainder of 13 ⅜" 72# L80 BTC casing to surface. Centralizers to go in the middle of the first joint, on the second coupling and the fourth coupling.

Cement: Lead: 505 sks EconoCem + Additives
Yield – 1.886 cu ft/sk @ 12.9 ppg

Tail: 240 sks HalCem + Additives
Yield – 1.332 cu ft/sk @ 14.8 ppg

Notify NMOCD in sufficient time to witness cementing of casing. After getting casing to TD, displace casing volume with the rig pump. RU cementers and cement as prescribed**.** If cement ***does not*** circulate, notify NMOCD. If cement ***does*** circulate, shut in head and WOC 8 hours (subject to change based on cement lab report). Cut off conductor & casing and weld on 13 ⅜" slip type wellhead. NU and test 13 ⅝" BOPE. MIRU mud loggers to be ready to begin logging upon drill out of shoe.

Wellhead: **13 ⅜" x 13 ⅝" 10M rated Vault conventional weld on type wellhead w/10M x 5M DSA.**

BOPE: **13 ⅝" 5M rated dual ram BOPE and 5M rated annular w/ rotating head.**

BOPE Testing: **Set test plug & test BOPE to 5000 psi with third party.**

Critical Vendors:

Vendor	Contact	Phone	Cell	Item
TBD				

First Intermediate Hole

Hole size: **12 ¼”**

Depth: **5230'**

Mud: Refer to attached mud program. Saturated Brine with 29 to 31 visc. (Mud weight not to exceed 10.3 ppg).

NOTE: **80’ conventional core will be obtained from 5120’ to 5200’ (depths to be adjusted based on drilled formation tops).**

BHA:

1	12 ¼” Bit
1	8” Bit Sub
1	12 ¼” Vertical Scout RSS
1	8” Straight Motor
1	8” Shock sub
1	8” Directional survey tool
1	12 ¼” Roller Stabilizer
12	8" DC
1	XO
21	6 ½” DC
1	XO

Shaker Screens: 170’s

Tubulars:

Item type	Casing	Drill Pipe
Size	9 ⅝”	5"
Weight (#/ft)	47	19.5
Grade	HCL-80	G-105
Thread	BTC	4 1/2 IF
ID (in)	8.681	4.276 (2.750 conn)
Burst (psi)	6870	
Collapse (psi)	4750	
Tension (klbs)	1086	
MU Torque (ft-lb)		
Rec Torque (ft-lb)	To Diamond	
Max Torque (ft-lb)		

Drilling: **Ensure 13 ⅝" triple ram BOP stack, 5M rated annular is installed prior to TIH**. Run 12 ¼” bit, BHA w/ RSS, survey tool and 5" DP to casing point. Test 13 ⅜” casing to 1500 psi for 30 minutes. RU WL & run cement bond log to verify sufficient cement placement. Saturated brine water will be used to minimize washout in salt sections. **Deviation not to exceed 3˚.** Seepage should be controllable with LCM sweeps. After drilling to 5230', pump heavy LCM sweep and circulate hole clean. TOOH. Run OH logs (GR-CAL-LL RES).

Casing: From 0' to 5230' – (9 ⅝" 47# HCL-80 BTC CSG)

Fill casing with drilling fluid every 20 jts or less as needed. Run float shoe, 1 jt 9 ⅝" 47# HCL-80 BTC casing, float collar and remainder of 9 ⅝" 47# HCL-80 BTC casing to surface. **Thread - lock float shoe and first 2 joints.** Centralizers will go in the middle of the first joint, on the second coupling and every third coupling thereafter. Float equipment should be PDC drillable.

Cement: Lead: 785 sks NeoCem + Additives
Yield – 2.158 cu ft/sk @ 11.5 ppg

Tail: 360 sks VersaCem + Additives
Yield – 1.228 cu ft/sk @ 14.5 ppg

Notify NMOCD in sufficient time to witness cementing of casing. After getting casing to TD, displace casing volume with the rig pump. RU cementers and cement as per cement recommendation. If cement ***does not*** circulate, notify NMOCD. If cement does circulate, test floats, RD cmt head, centralize casing in wellhead and WOC 18 hours (subject to change based on cement lab report). Run wireline cement bond log to verify sufficient cement placement. ND 13 ⅝" BOPE. Top off w/ 14.8 ppg neat cement as required. Set slips, cut off casing and

install Vault 13 ⅝" x 11" 10M casing spool with 11" x 13 ⅝ 10M DSA.

Wellhead: **Vault 13 ⅝" x 11" 10M casing spool with 11" 10M x 13 ⅝ 5M DSA**

BOPE: **13 ⅝" 5M rated dual ram BOP stack, 5M rated annular & MPD system.**

BOPE Testing: **Set test plug & test BOP Rams & Annular to 5000 psi with third party.**

Critical Vendors:

Vendor	Contact	Phone	Cell	Item
TBD				

Production Hole

Hole size: **8 ½"**

Depth: **7600'**

Mud: Refer to attached mud program. Cut Brine 9.3 to 9.4 ppg, 29 to 34 visc. Mud weight not to exceed 10 ppg. **Active acid gas injection zone from 6200'-6700', ~1000' to east. Gas plume not expected to be present at this location, but possible. Adjust mud weight on drill out to prevent acid gas influx. Seepage is preferable to influx.**

NOTE: **80' conventional cores will be obtained from 5700' to 5780' and 6250' to 6330' (depths to be adjusted based on drilled formation tops).**

BHA:

1	8 ½" Bit
1	6" Bit Sub
1	8 ½" RSS Scout
1	6" Straight Motor
1	6 ¼" Shock sub
1	6 ¼" Directional survey tool
1	8 ½" Roller Stabilizer
27	6 ½" DC
1	XO
1	8 ½" Bit
1	6" Bit Sub

Shaker Screens: 170's

Tubulars:

Item type	Casing	Casing	Drill Pipe
Size	7”	7”	5"
Weight (#/ft)	32#	32#	19.5
Grade	L-80	G3 CRA	G-105
Thread	VAMSTL	VAMSTL	4 1/2 IF
ID (in)	6.094	6.094	4.276 (2.750 conn)
Burst (psi)	9060	12460	
Collapse (psi)	8600	10780	
Tension (klbs)	745	1025	
MU Torque (ft-lb)			
Rec Torque (ft-lb)	TBD	TBD	
Max Torque (ft-lb)			

Drilling:

Ensure 13 ⅝" 10M rated triple ram BOP stack, 5M rated annular & MPD system are NU & tested. Ensure H_2S monitors and related safety equipment are operational, with safety supervisor on duty. PU 8 ½" bit, BHA and 5" drill pipe back to surface. Drill out float collar and cement. Do not drill float shoe. **Test casing to 1500 psi for 30 mins with rig pump**. TOOH. RU WL & run cement bond log to verify sufficient cement placement. PU 8 ½" bit, BHA w/ RSS, survey tools and 5" drill pipe back to surface and drill out shoe. **Before drilling 20' into formation, perform a FIT to 10.0 ppg mud equivalent. Deviation not to exceed 3˚.** Utilize mud cleaning equipment to keep fluid as clean as possible. Seepage should be controllable with LCM sweeps. When drilled to 5700’ coring depth, TOOH. LD BHA and PU 8 ½” conventional coring assembly and 5” drill pipe back to surface. Core 80’ to 5780’ and TOOH. LD core and coring assembly. PU 8 ½" bit, BHA w/ RSS, survey tools and 5" drill pipe back to surface. Continue drilling to next coring depth at 6250’. TOOH. LD BHA and PU 8 ½” conventional coring assembly and 5” drill pipe back to surface. Core 80’ to 6330’. PU 8 ½" bit, BHA w/ RSS, survey tools and 5" drill pipe back to surface. Continue drilling to 7600’ casing depth. Note may need to adjust TD to one joint deeper than desired, so can leave full shoe joint full of cement below bottom perforation. Pump heavy LCM sweep and circulate hole clean. TOOH. Run OH logs (GR-CNL-DEN-CAL-IND RES-FMI).

Casing: From 0' to 7600' – (7" 32# P-110 VAMSTL CSG)
(DV-ECP tools @ 5280' and 5580'. G3 CRA casing from 5280' to 5580').
NOTE: Running 7" SureView Fiber System on outside of casing, to ~5280', above top of upper DV-ECP tool (DO NOT RUN FIBER SYSTEM ACROSS INTERVAL TO BE PERFORATED).

Fill casing with drilling fluid every 20 jts or less as needed. Run float shoe, 1 jt 7" 32# L-80 VAM STL casing, float collar, ~2000' - 7" 32# L-80 VAM STL casing, **DV-ECP TOOL,** 300' 7" 32# **G3 CRA VAM STL** casing, & **DV-ECP TOOL.** Adjust number of jts to place top of lower DV-ECP tool at 5580' and bottom of upper DV-ECP tool at 5280'. Run remainder of 7" 32# L-80 VAM STL casing to surface. **Thread - lock guide shoe, first 2 joints, and DV-ECP tools.** Run centralizers in the middle of 1st joint, top of 2nd joint, then centralizers every 3rd coupling. Ensure one centralizer on first full joint below each DV-ECP tool and one centralizer on first full joint above each DV-ECP tool. Float equipment should be PDC drillable. **Land 7" casing using conventional wellhead slips upon bumping the plug.**

Cement:

Stage 1: Lead: 210 sks CorrosaCem + Additives
Yield – 1.243 cu ft/sk @ 14.5 ppg

DV-ECP TOOL @ 5580'

Stage 2: Lead: 9.1 bbl WellLock + Additives @ 12.8 ppg

DV-ECP TOOL @ 5280'

Stage 3: Lead: 320 sks NeoCem + Additives
Yield – 1.934 cu ft/sk @ 12.5 ppg

Tail: 120 sks VersaCem + Additives
Yield – 1.332 cu ft/sk @ 14.8 ppg

Notify NMOCD in sufficient time to witness cementing of casing. After getting casing to TD, displace casing volume with the rig pump. RU cementers and cement as per recommendation**.** If cement ***does not*** circulate to surface on any stage, notify NMOCD. If cement ***does*** circulate, set slips and WOC 18 hours (subject to change based on cement lab report). ND 13 ⅝" BOPE, cut off casing & NU 11" x 7 1/16" 10M Vault tubing spool, and 7 1/16" 5M dual ram completion BOPE. RDMO mud loggers, directional, solids control, drilling mud, bits, BHA tools.

Wellhead: **Vault 11" 10M x 7 1/16" 10M tubing spool w/ 10M x 5M DSA**

BOPE: **7 1/16" 5M dual ram completion BOP.**

BOPE Testing: **None. Ensure 7 1/16" 5M dual ram completion BOP is pre-tested by vendor, prior to delivery to location.**

Critical Vendors:

Vendor	Contact	Phone	Cell	Item
TBD				

Completion:

Bit size: 5 ⅞"

Depth: **7600'**

Mud: Cut Brine 8.4 to 8.6 ppg, 29 to 32 visc.

BHA:

1	5 ⅞" Bit
1	4 ⅞" Bit Sub
33	4 ⅞" DC
1	XO

Shaker Screens: 170's

Tubulars:

Item type	Drill Pipe	Drill Collar
Size (in)	4"	4 ⅞"
Weight (#/ft)	15.91	44
Grade	S-135	S-135
Thread	XT-39	XT-39
ID (in)	2.963	2.963
Burst (psi)	19,490	
Collapse (psi)	20,140	
Tension (klbs)	403,500	663,700
Min MU Torque (ft-lb)	22,850	17,000
Max MU Torque (ft-lb)	25,150	20,300

Drill out #1: **Ensure 7 1⁄16" 5M rated dual ram completion BOP stack is NU & Tested**. PU 5 ⅞" bit. Drill out float collar and cement to PBTD of XXXX' (TBD). Do not drill shoe joint. **Test casing to 1815 psi for 30 mins with rig pump**. TOOH. RU WL and run cement bond log to verify sufficient cement placement. Run VSP & Dipole Sonic on WL.

Stage 1 Perforating: WL perforate ~1300' w/ 6 spf, 60 deg, 3 ⅛" guns (PBTD to top of Cherry Canyon, depths TBD from OH logs).

Stage 1 Stimulation: PU 7” test packer & 4" XT39 DP to surface. Set packer at ~6200’ (depth may adjust depending on actual formation tops). Pump acid and frac as per design (TBD). Unseat test packer and TOOH.

Stage 2 Perforating: RU WL and set 7” composite plug at ~6200’. WL perforate ~600’ w/ 6 spf, 60 deg, 3 ⅛” guns (top of Cherry Canyon to top of Bell Canyon, depths TBD from OH logs). Top perforation no higher than 50’ below bottom of lower DV-ECP tool.

Stage 2 Stimulation: PU 7” test packer & 4" XT39 DP to surface. Set packer at ~5200’ (depth may adjust depending on actual formation tops). Pump acid and frac as per design (TBD). Unseat test packer and TOOH.

Drill out #2: PU 5 ⅞” bit & 4" XT39 DP to surface. Drill out composite bridge plug. TOOH. LD bit and PU 5 ⅞” taper mill. RIH w/ mill to ensure casing clear to PBTD.

Stage 3 Stimulation: PU 7” test packer & 4" XT39 DP to surface. Set packer at ~5200’ and pump acid job and SRT as per design (TBD). TOOH, LD 4” DP & BHA.

Packer: 7” x 3 ½" Inconel 925 permanent packer w/ X profile nipple

Packer Fluid: Diesel, with anti-corrosion and biocide additives

Packer Setting: RU wireline truck. PU Setting Tool, CCL & 3 ½" x 7" Perma-Pak Packer with 1 jt 3 ½" 9.3# casing tail pipe & pump out plug. RIH on wireline to packer setting depth **(~5,560’, < 100’ to TOP OF APPROVED INJECTION INTERVAL. Ensure packer set within, but at base of well lock resin and CRA from 7” cement job)** & set packer. POOH & RD wireline truck.

Tubing: From 0’ to ~5560’ (3 ½” 9.3# VAMACE G3 CRA)
Note: Subsurface safety valve w/ X profile nipple (SSSV) set @ 175’, and DTS fiber optic system w/ bottomhole pressure-temperature annular and tubing gauges will be run concurrently with tubing. Each tubing connection to be pressure tested at time of assembly using internal helium testing.

RU casers. RIH to 5260’ with 3 ½” tubing, Packer Top Sub, and DTS fiber optic system with P-T sensors & SSSV as per design. PU landing joint and space out packer to correspond with proper landing depth. Lightly tag packer to confirm space out. Reverse circulate diesel packer fluid down backside & up tubing. Pump 25% excess. Once backside is displaced, sting into packer & set Halliburton recommended weight on packer, based on Halliburton tubing movement calculator. ND completion BOP & set well head slips with remaining string weight. LD BOP & NU injection tree with third party NU crew. Pressure test annulus to 500 psi minimum for 30 minutes using rig pump. 10% deviation from initial pressure is maximum allowable in first 15 minutes, 0% deviation

thereafter. **Function test SSSV, DTS fiber optic system & P-T gauges and all associated surface equipment prior to releasing vendor crews and RDMO.** RDMO drilling rig.

Note: Schedule MIT & SRT with Gary Robinson, NMOCD Hobbs (575)-263-4507, as soon as well completion date is known. NOTE: Notify of both MIT and SRT, as both will require NMOCD witness (confirm SRT witness required as per order COA, upon issuance by NMOCD).

Step Rate Test: **Upon successful MIT (date TBD), and after well has been shut in for 5 days minimum,** RU slickline fiber optic DTS system on crane to PBTD. Perform baseline temperature survey. POOH with DTS system. RU pumping equipment & pump SRT as per design (TBD). RD pumping equipment. Immediately upon completion of SRT, RIH with DTS system to PBTD and continuously monitor temperature build up for ~5 days (exact time TBD, depending on results). RDMO slickline DTS unit. SIW. Release all equipment, clean up & secure location.

Wellhead: **Vault 7 1/16" 10M x 3 1/16" 10M injection tree**

Critical Vendors:

Vendor	Contact	Phone	Cell	Item
TBD				

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
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-51970	98335	AGI; DELAWARE

[4] Property Code	[5] Property Name	[6] Well Number
333568	RED HILLS AGI	3

[7] OGRID No.	[8] Operator Name	[9] Elevation
331548	TARGA NORTHERN DELAWARE, LLC	3578.97'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	13	24 S	33 E		3116	NORTH	1159	EAST	LEA

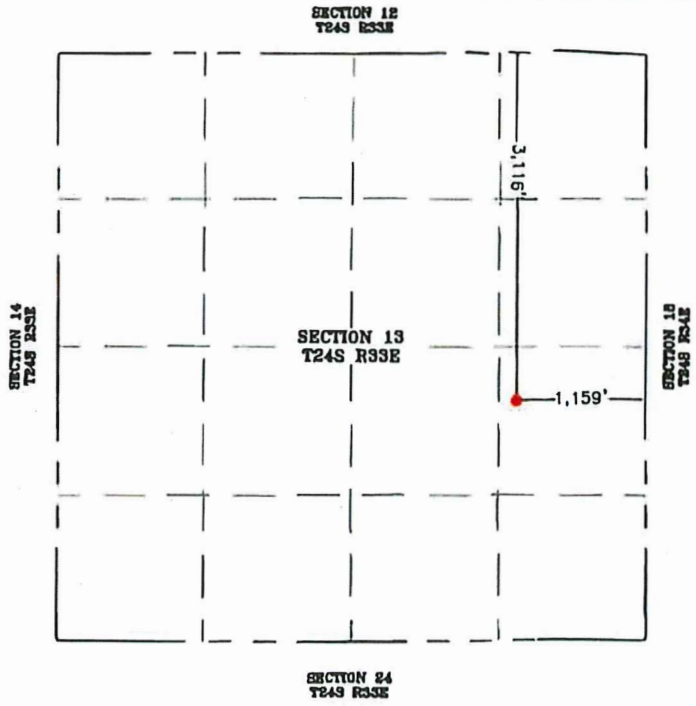
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

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.

[16]



NAD 83 NME
SUFACE HOLE LOCATION
Y= 443,359.6
X= 792,481.2
ELEV= 3,578.97'
LAT= 32.216264°N
LON= 103.521261°W

NAD 27 NME
SUFACE HOLE LOCATION
Y= 441,793.6
X= 752,160.4
ELEV= 3,578.97'
LAT= 32.212103°N
LON= 103.518506°W

[17] 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

Matt Eale 6-7-23
Signature Date

Matt Eaier
Printed Name

matt.eaier@targaresources.com
E-mail Address

[18] 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.

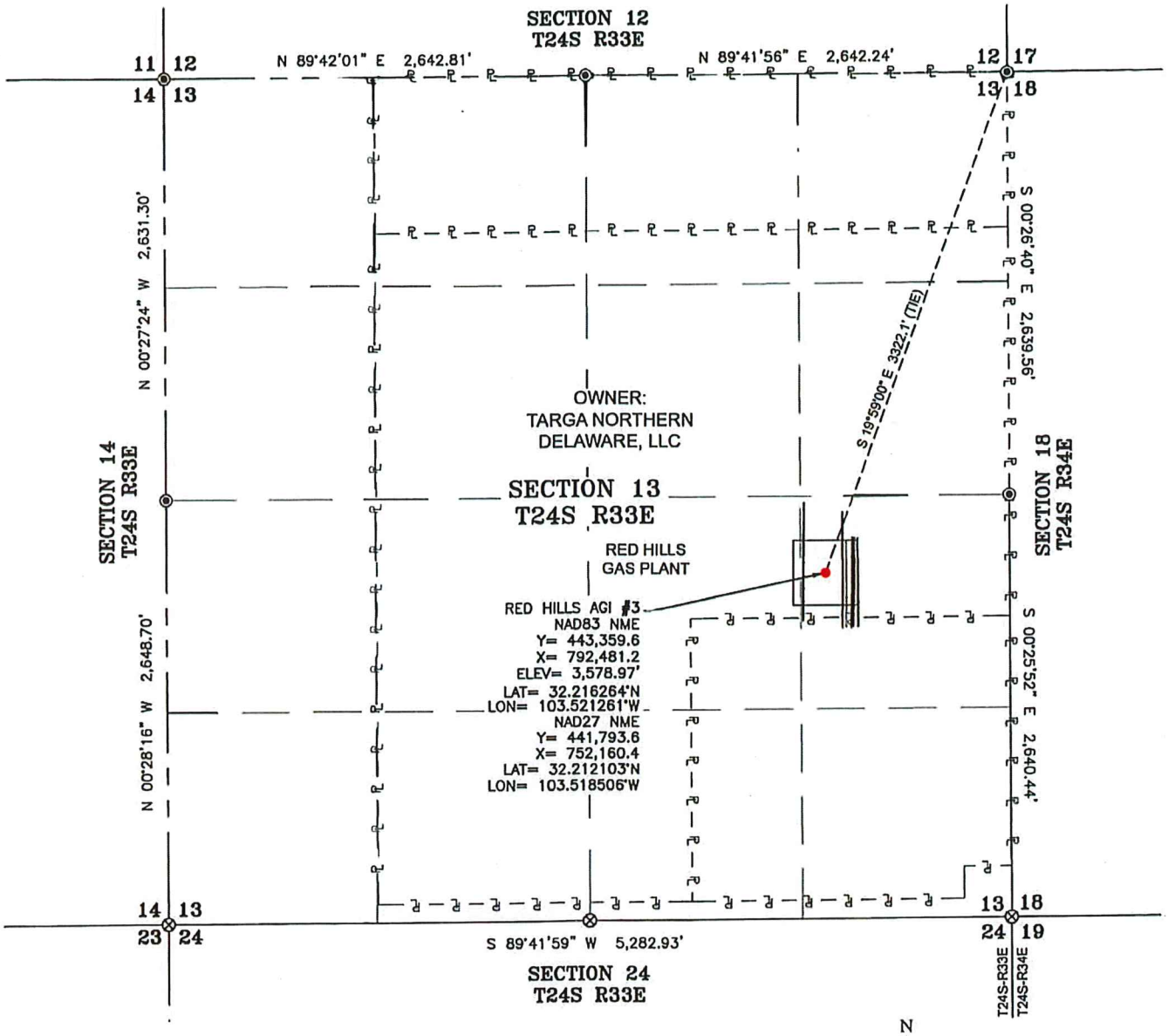
5/9/23
Date of Survey

Signature and Seal of Professional Surveyor:

STANLEY W. DRANNON
STATE OF NEW MEXICO
NO. 23002
REGISTERED PROFESSIONAL SURVEYOR

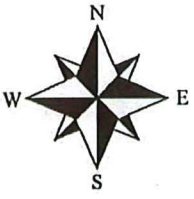
STANLEY W. DRANNON 23002
Certificate Number ALT TAR-028

SECTION 13, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO



RED HILLS SE WELL
SECTION LINE DISTANCE
SHL 3116' FNL & 1159' FEL

STANLEY W. DRANNON
STATE OF NEW MEXICO
NO. 23002
REGISTERED PROFESSIONAL SURVEYOR



1" = 1,000 FEET

- ○ BEGIN, END OR ANGLE POINT
- ◉ FOUND USGLO BRASS CAP
- ◔ CALCULATED CORNER
- —℄—℄— PROPERTY LINE
- ——— SECTION LINE

I, Stanley W. Drannon, New Mexico PLS No. 23002, hereby certify this survey made on the ground under my supervision. This survey meet the minimum standards for surveying in New Mexico.

5/9/23
STANLEY W. DRANNON — Date
NEW MEXICO R.P.L.S. NO. 23002

NOTES:
1. BEARINGS AND DISTANCES CONFORM TO THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD83, IN U.S. SURVEY FEET.

DRAWN BY: ALT	SCALE: 1" = 1000'
CHECKED: JS	W.O. No.: TAR-028
DATE: 5/9/23	
AFE:	
REV:	

WELL LOCATION PLAT
RED HILLS AGI #3

PROSPECT SURVEYING
9231 BOAT CLUB ROAD, FORT WORTH TX 76179
PH: 817-999-7385 FIRM NO. 10194267

TARGA

WELLBORE SCHEMATIC
Targa Resources
Red Hills Delaware AGI #3
3116' FNL & 1159' FEL
Sec 13, Twp 24S, Rge 33E
GL 3578', RKB TBD

Surface - (Conventional)

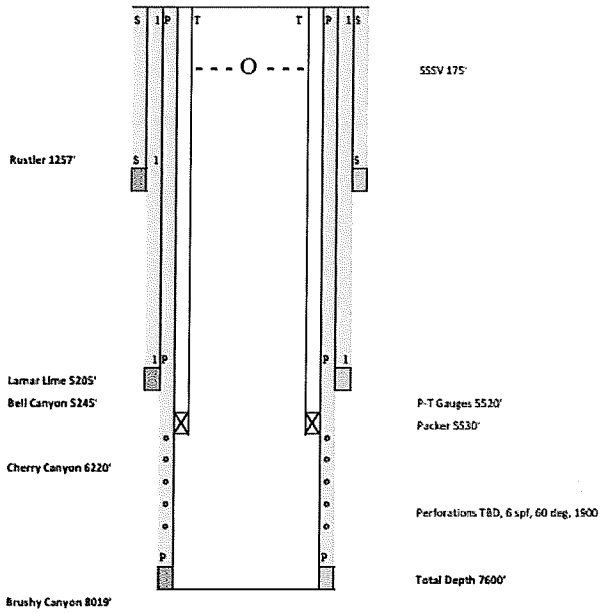
Hole Size:	17.5"
Casing:	13.375" 72# H-40 BTC
Depth Top:	Surface
Depth Btm:	1307'
Cement:	745 sks Class C + Additives (plus excess)
Cement Top:	Surface - (Circulate)

Intermediate #1 - (Conventional)

Hole Size:	12.25"
Casing:	9.625" 47# L-80 BTC
Depth Top:	Surface
Depth Btm:	5230'
Cement:	1145 sks Class C + Additives (plus excess)
Cement Top:	Surface - (Circulate)

Production - (Conventional)

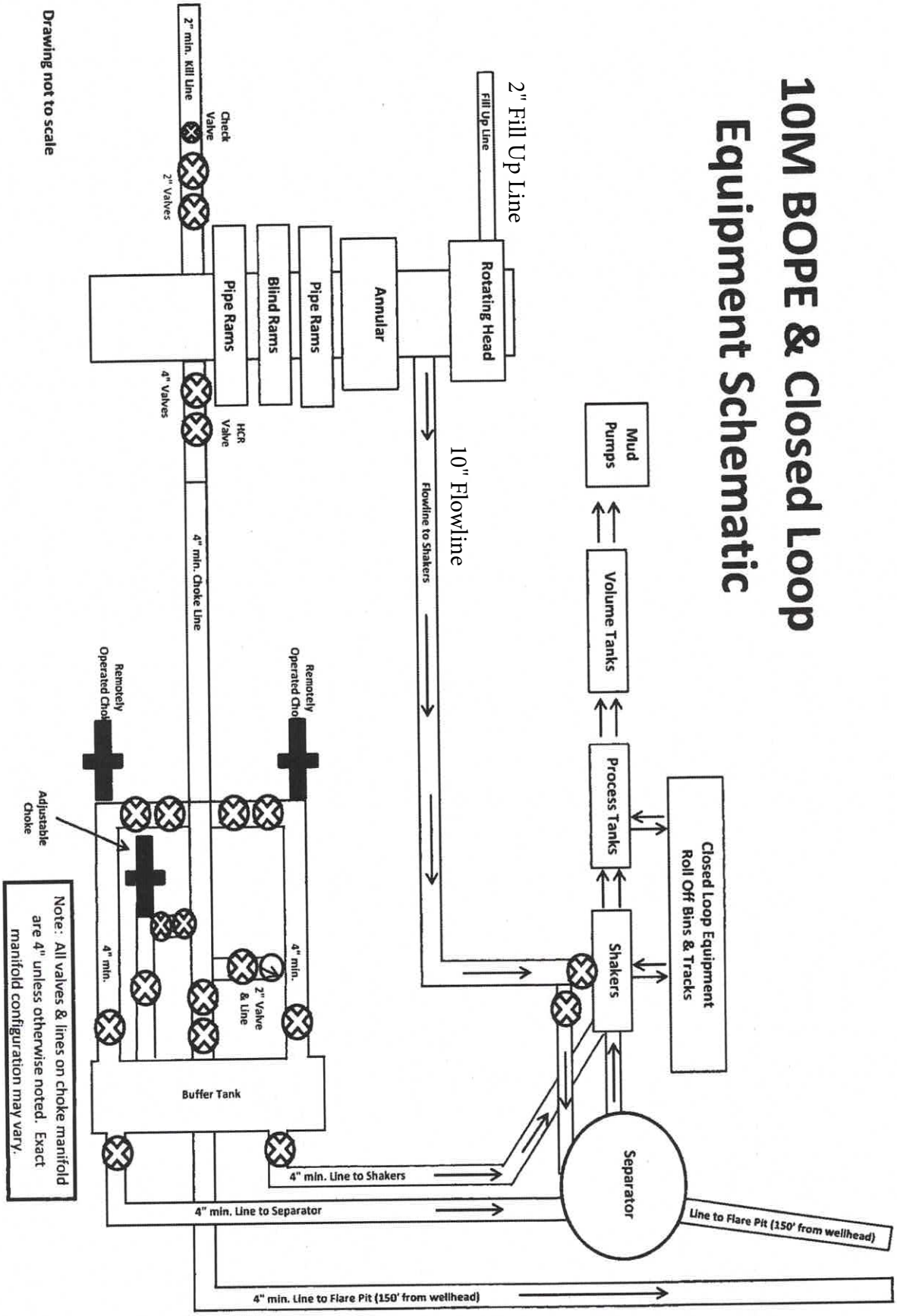
Tubing Depth:	8.5"
Casing 1:	7" 32# L-80 BTC
Depths:	0' to 5280' & 5580' to 7600'
Casing 2:	7" 32# G3 CRA VAMTOP
Depths:	5280'-5580'
Cement:	650 sks Class C + Add (plus excess)
	9 bbl Well Lock resin 5280'-5580'
DV-ECP Tools:	5280' & 5580'



Tubing

Depth:	5530'
Tubing:	3.5" 9.3# G3 CRA VAMACE
Packer:	7" x 3.5" PermaPak or equivalent (Inconel)
SSSV:	175'
PT Gauges:	5520'
Packer Fluid:	Diesel + Additives

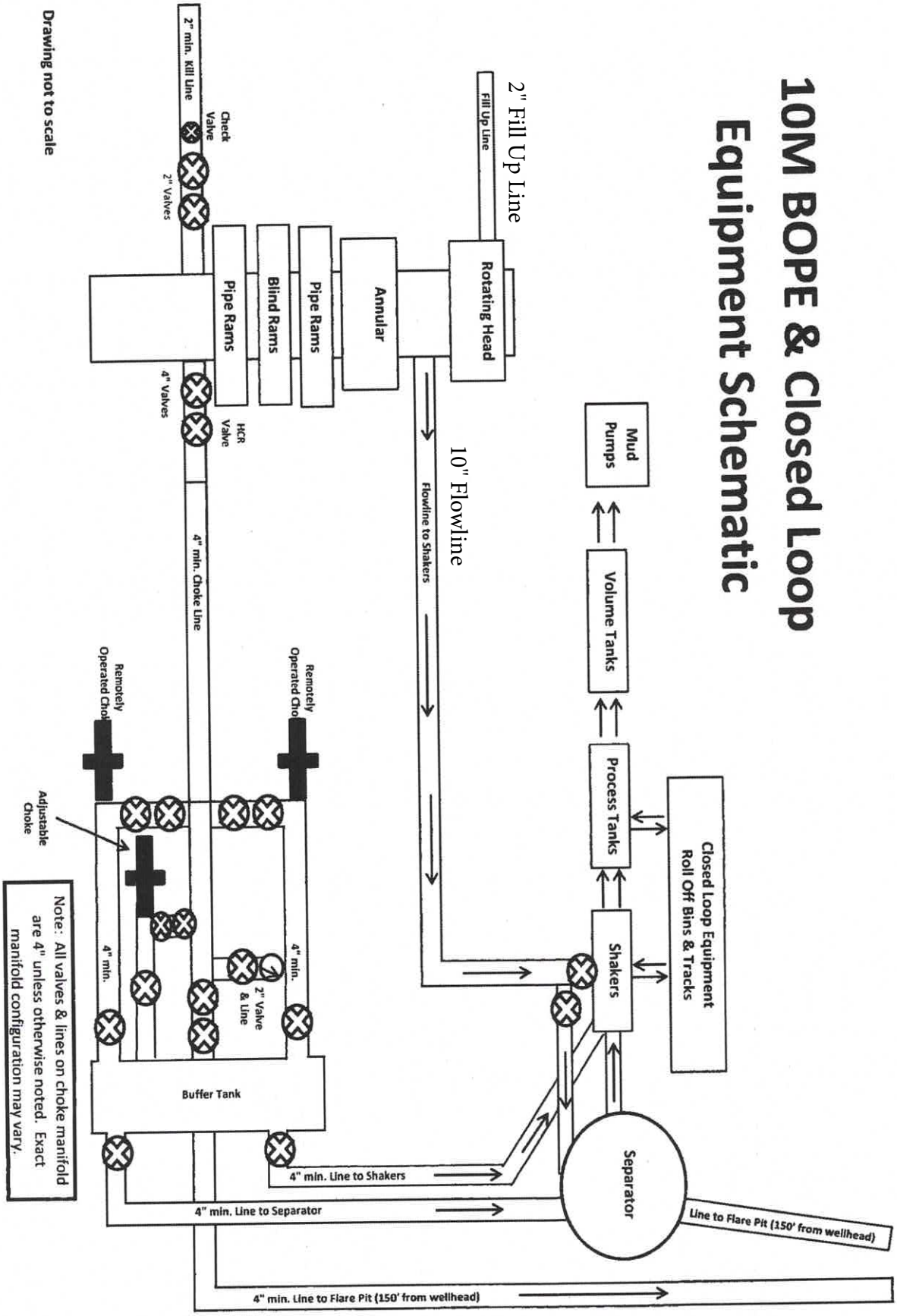
10M BOPE & Closed Loop Equipment Schematic



The well will be drilled vertically to its anticipated total depth of approximately 7,600 feet. The injection zone (5,600-7,600 feet) will be completed as a cased hole interval. Table 2 lists the anticipated geological formations, depths, and potential for water or hydrocarbons.

Table 2: Formation tops expected within the Red Hills AGI #3

Formation	Measured Depth (ft)	Identification
Cenozoic alluvium	Surface	USDW
Santa Rosa Sandstone	~650-910	USDW, Gas
Rustler	1,257	USDW
Salado - Castile	1,351	Confining zone
Lamar Lime	5,205	Confining zone
Bell Canyon	5,245	Injection zone
Cherry Canyon	6,220	Injection zone
Brushy Canyon	8,019	Underlaying zone


10M BOPE & Closed Loop
Equipment Schematic
2" Fill Up Line
10" Flowline
Drawing not to scale
Fill Up Line
Rotating Head
Annular
Pipe Rams
Blind Rams
Pipe Rams
2" min. Kill Line
Check Valve
2" Valves
4" Valves
HCR Valve
4" min. Choke Line
Flowline to Shakers
Mud Pumps
Volume Tanks
Process Tanks
Shakers
Closed Loop Equipment
Roll Off Bins & Tracks
Separator
Remotely Operated Choke
Remotely Operated Choke
Adjustable Choke
4" min.
4" min.
2" Valve & Line
Buffer Tank
4" min. Line to Shakers
4" min. Line to Separator
Line to Flare Pit (150' from wellhead)
4" min. Line to Flare Pit (150' from wellhead)
Note: All valves & lines on choke manifold are 4" unless otherwise noted. Exact manifold configuration may vary.

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Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 255793

CONDITIONS

Operator: Targa Northern Delaware, LLC. 110 W. 7th Street, Suite 2300 Tulsa, OK 74119	OGRID: 331548
	Action Number: 255793
	Action Type: [C-101] Drilling Non-Federal/Indian (APD)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a Deviation Survey with the C-105	9/8/2023
pkautz	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	9/8/2023
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	9/8/2023
pkautz	Notify OCD 24 hours prior to casing & cement	9/8/2023
pkautz	Cement must circulate on all strings.	9/8/2023
pkautz	IF ON ANY STRING CEMENT DOES NOT CIRCULATE, A RCBL MUST BE RUN ON THAT STRING OF CASING.	9/8/2023
pkautz	In addition to the requirements of the APD, operator shall complete the conditions contained in the UIC permit including logging (CBL for liner; mud logging, etc.), well testing, and reporting as stipulated.	9/8/2023