

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

OCD - HOBBS
07/27/2020
RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator [260297]		8. Lease Name and Well No. [320524]
3a. Address	3b. Phone No. (include area code)	9. API Well No. 30-025-47461
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		10. Field and Pool, or Exploratory [98094]
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		12. County or Parish
16. No of acres in lease		13. State
17. Spacing Unit dedicated to this well		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		
19. Proposed Depth		
20. BLM/BIA Bond No. in file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		
22. Approximate date work will start*		
23. Estimated duration		
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|--|---|
| 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 requested by the BLM. |

25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title		
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.

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.

GCP Rec 07/27/2020

SL

(Continued on page 2)

APPROVED WITH CONDITIONS
Approval Date: 07/10/2020

KZ
07/28/2020

*(Instructions on page 2)



APD ID: 10400054749

Submission Date: 03/03/2020

Highlighted data
reflects the most
recent changes

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - General

APD ID: 10400054749

Tie to previous NOS? N

Submission Date: 03/03/2020

BLM Office: CARLSBAD

User: Sammy Hajar

Title: Regulatory Analyst

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM0005792

Lease Acres: 680

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? Y

Permitting Agent? NO

APD Operator: BTA OIL PRODUCERS LLC

Operator letter of designation:

Operator Info

Operator Organization Name: BTA OIL PRODUCERS LLC

Operator Address: 104 S. Pecos

Zip: 79701

Operator PO Box:

Operator City: Midland

State: TX

Operator Phone: (432)682-3753

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: BOBCAT DRAW

Pool Name: BOBCAT DRAW;
UPPER WOLFCAMP

Is the proposed well in an area containing other mineral resources? NONE

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Is the proposed well in an area containing other mineral resources? NONE

Is the proposed well in a Helium production area? N

Use Existing Well Pad? N

New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name: ROJO Number: 20H AND 21H
7811 34-27 FED COM

Number of Legs: 1

Well Class: HORIZONTAL

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 22 Miles

Distance to nearest well: 30 FT

Distance to lease line: 660 FT

Reservoir well spacing assigned acres Measurement: 240 Acres

Well plat: Rojo_21H_c102_signed_20200303064232.pdf

Well work start Date: 06/06/2020

Duration: 30 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NGVD29

Survey number:

Reference Datum: GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL Leg #1	2600	FSL	660	FWL	25S	33E	34	Aliquot NWS W	32.086913	-103.566608	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 0005792	3325	0	0	Y
KOP Leg #1	2540	FNL	330	FWL	25S	33E	34	Aliquot SWN W	32.087289	-103.567674	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 0005792	-8507	11846	11832	Y
PPP Leg #1-1	2540	FNL	330	FWL	25S	33E	34	Aliquot SWN W	32.087289	-103.567674	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 0005792	-8818	12189	12143	Y

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
PPP Leg #1-2	21	FSL	330	FW L	25S	33E	27	Aliquot SWS W	32.094346	- 103.567691	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 015091	- 8984	14800	12309	Y
EXIT Leg #1	100	FNL	330	FW L	25S	33E	27	Aliquot NWN W	32.108512	- 103.567726	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 015091	- 8984	19724	12309	Y
BHL Leg #1	50	FNL	330	FW L	25S	33E	27	Aliquot NWN W	32.108649	- 103.567726	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 015091	- 8984	20004	12309	Y

APD ID: 10400054749

Submission Date: 03/03/2020

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reflects the most
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Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
677360	QUATERNARY	3325	0	0	ALLUVIUM	NONE	N
677361	RUSTLER	745	2580	2580	ANHYDRITE	NONE	N
677362	TOP SALT	675	2650	2650	SALT	NONE	N
677363	BASE OF SALT	-1375	4700	4700	SALT	NONE	N
677364	DELAWARE	-1600	4925	4925	LIMESTONE	NATURAL GAS, OIL	N
677373	BELL CANYON	-1685	5010	5010	SANDSTONE	NONE	N
677366	CHERRY CANYON	-2945	6270	6270	SANDSTONE	NATURAL GAS, OIL	N
677367	BRUSHY CANYON	-4190	7515	7515	SANDSTONE	NATURAL GAS, OIL	N
677371	BONE SPRING LIME	-5714	9039	9039	LIMESTONE	NATURAL GAS, OIL	N
677374	FIRST BONE SPRING SAND	-6692	10017	10017	SANDSTONE	NATURAL GAS, OIL	Y
677375	BONE SPRING 2ND	-7291	10616	10616	SANDSTONE	NATURAL GAS, OIL	Y
677376	BONE SPRING 3RD	-8380	11705	11705	SANDSTONE	NATURAL GAS, OIL	Y
677377	WOLFCAMP	-8818	12143	12143	SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Pressure Rating (PSI): 10M

Rating Depth: 14000

Equipment: The blowout preventer equipment (BOP) shown in Exhibit A will consist of a (10M system) double ram type (10,000 psi WP) preventer and a bag-type (Hydril) preventer (5000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 5 drill pipe rams on bottom. The BOPs will be installed on the 10-3/4" surface casing and utilized continuously until total depth is reached. A 2 kill line and 3 choke line will be incorporated in the drilling spool below the ram-type BOP. A remote kill line will be used for the 10M system as per onshore order #2. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines, and choke manifold having a 10,000 psi WP rating. The 5M annular on the 10M system will be tested to 100% of rated working pressure.

Requesting Variance? YES

Variance request: A Choke Hose Variance is requested. See attached test chart and spec. 5M annular variance requested.

Testing Procedure: Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drillers log. All BOPs and associated equipment will be tested as per BLM drilling Operations Order No. 2.

Choke Diagram Attachment:

Choke_Hose___Test_Chart_and_Specs_20190723082742.pdf

10M_choke_mannifold_20200302080700.pdf

BOP Diagram Attachment:

BLM_10M_BOP_with_5M_annular_20200302080730.pdf

10M_annular_variance_20200302080941.pdf

5M_annular_well_control_plan_for_BLM_20200602141427.docx

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	14.75	10.75	NEW	API	N	0	1000	0	1000	3325	2325	1000	J-55	40.5	ST&C	3.7	7.3	DRY	10.4	DRY	15.5
2	INTERMEDIATE	9.875	7.625	NEW	API	Y	0	8014	0	8000	3325	-4675	8014	P-110	29.7	BUTT	1.4	2.4	DRY	4	DRY	3.9
3	PRODUCTION	6.75	5.5	NEW	API	Y	0	11585	0	11571	3325	-8246	11585	P-110	20	BUTT	1.3	1.5	DRY	2.9	DRY	2.8
4	INTERMEDIATE	8.75	7.625	NEW	API	Y	8014	11785	8000	11771	-4675	-8446	3771	P-110	29.7	FJ	1.7	1.6	DRY	2.7	DRY	2.7
5	PRODUCTION	6.75	5.0	NEW	API	Y	11585	20004	11571	12309	-8246	-8984	8419	P-110	18	BUTT	1.3	1.4	DRY	1.7	DRY	1.6

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Rojo_21H_casing_assumption_20200302134649.JPG

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

7_5_8_tapered_string_spec_9_7_8_hole_20200302134853.jpg

Casing Design Assumptions and Worksheet(s):

Rojo_21H_casing_assumption_20200302134918.JPG

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

5.5_tapered_string_spec_20200302135335.jpg

Casing Design Assumptions and Worksheet(s):

Rojo_21H_casing_assumption_20200302135612.JPG

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Casing Attachments

Casing ID: 4 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

7_5_8_tapered_string_spec_20200302135133.jpg

Casing Design Assumptions and Worksheet(s):

Rojo_21H_casing_assumption_20200302135151.JPG

Casing ID: 5 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

5_tapered_string_spec_20200302135720.jpg

Casing Design Assumptions and Worksheet(s):

Rojo_21H_casing_assumption_20200302135726.JPG

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	755	470	1.8	13.5	846	100	Class C	2% CaCl2
SURFACE	Tail		755	1000	200	1.34	14.8	268	100	Class C	2% CaCl2
INTERMEDIATE	Lead	4916	0	4490	720	2.19	12.7	1576.8	50	Class C	0.5% CaCl2
INTERMEDIATE	Tail		4490	4916	150	1.33	14.8	199.5	50	Class C	1% CaCl2
INTERMEDIATE	Lead		4916	8235	340	2.64	10.5	897.6	25	Class H	0.5% CaCl2

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		8235	1178 5	400	1.19	15.6	476	25	Class H	1% CaCl2
PRODUCTION	Lead		1078 5	1158 5	0	0	0	0		n/a	n/a

PRODUCTION	Lead		1158 5	2000 4	900	1.27	14.8	1143	10	Class H	0.1% Fluid Loss
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Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

Describe the mud monitoring system utilized: PVT/Pason/Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1000	OTHER : FW SPUD	8.3	8.4							
1000	1178 5	OTHER : DBE	9	9.4							
1178 5	1230 9	OTHER : OBM	11	14							

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Drill Stem Tests will be based on geological sample shows.

List of open and cased hole logs run in the well:

MUD LOG/GEOLOGICAL LITHOLOGY LOG,GAMMA RAY LOG,CEMENT BOND LOG,

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 8961

Anticipated Surface Pressure: 6253

Anticipated Bottom Hole Temperature(F): 180

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

BTA_Oil_Producers_LLC___EMERGENCY_CALL_LIST_20190723161502.pdf

H2S_Equipment_Schematic_20190723161502.pdf

H2S_Plan_20190723161502.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Rojo_21H_wall_plot_20200302140841.pdf

Rojo_21H_directional_plan_20200302140841.pdf

Rojo_7811_34_27_FED_COM_21H_Gas_Capture_Plan_20200302140858.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

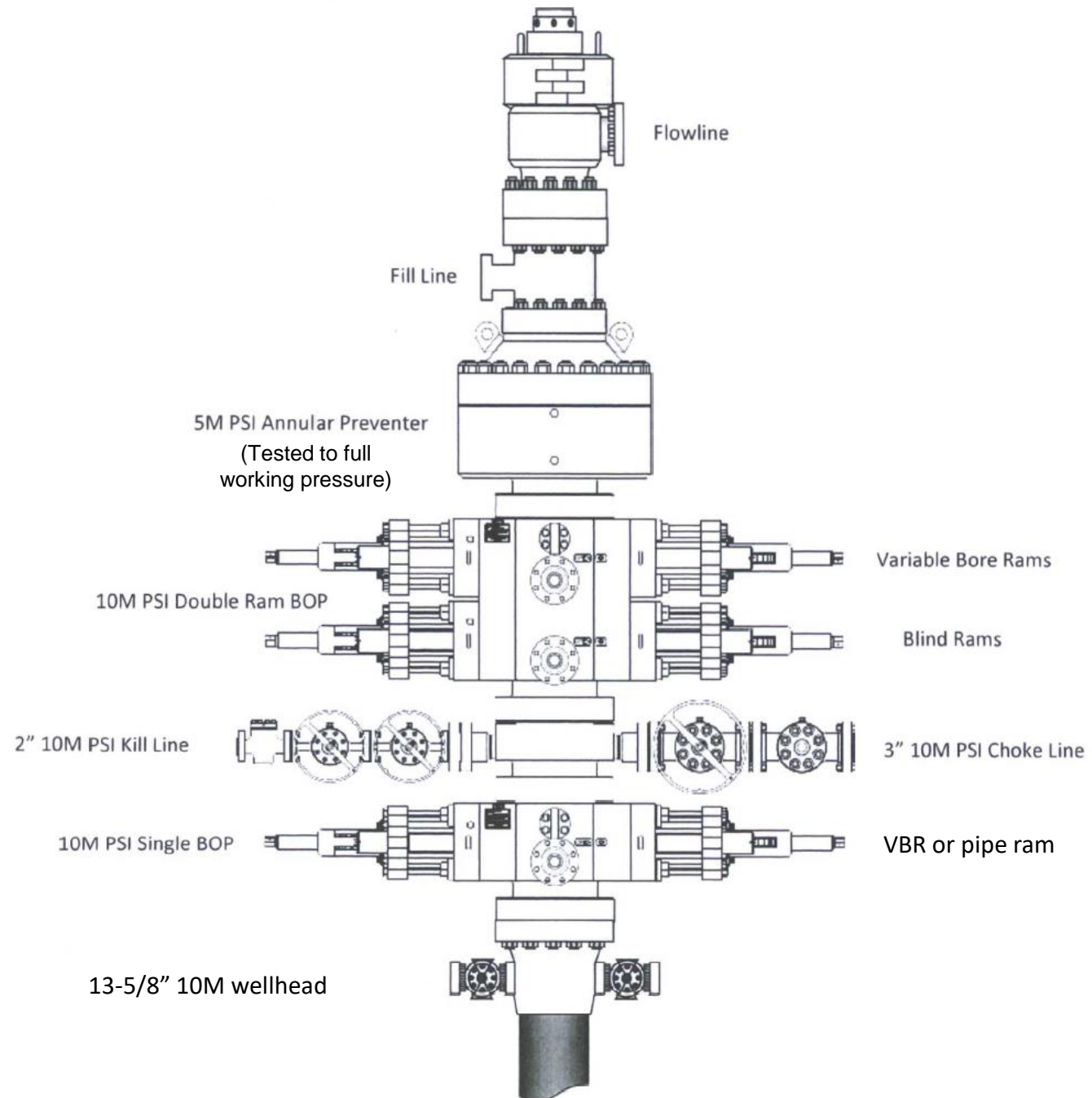
Other Variance attachment:

BOP_Break_Testing_Variance_20200106151949.pdf

Casing_Head_Running_Procedure_20190723163249.pdf

BTA_MB_10_34___7_58___5_12_20200602141513.pdf

13-5/8" 10M PSI BOP Stack



Drilling component and preventer compatibility table **for 10M approval**

The following table outlines the drilling and production liner components for Wolfcamp targets requiring 10M BOPE approval. Variance is requested to utilize a 5M annular preventer in 6-1/8" hole as all components can be covered using 10M rated VBR's (variable bore rams). 5M annular on the 10M system will be tested to 100% of rated working pressure.

6-1/8" hole section – 10M BOPE requirement (13-5/8" BOP)			
Component	OD	Preventer	RWP
Drill pipe	4"	3.5"-5.5" VBR	10M
HWDP	4"	3.5"-5.5" VBR	10M
Jars	5"	3.5"-5.5" VBR	10M
DC's and NMDC's	4-3/4"	3.5"-5.5" VBR	10M
Mud motor	5"	3.5"-5.5" VBR	10M
Casing	4-1/2"	3.5"-5.5" VBR	10M
Open hole	NA	Blind rams	10M

12-1/4" & 8-3/4" hole sections – 5M BOPE requirement (13-5/8" BOP)			
Component	OD	Preventer	RWP
Drill pipe	5"	3.5"-5.5" VBR or 5" pipe rams	10M
HWDP	5"	3.5"-5.5" VBR or 5" pipe rams	10M
Jars	6-1/4"	Annular	5M
DC's and NMDC's	7"-8"	Annular	5M
Mud motor	7"-8"	Annular	5M
Casing	9-5/8" & 7"	Annular	5M
Open hole	NA	Blind rams	10M

Drilling

1. Sound alarm (alert crew).
2. Space out drill string.
3. Shut down pumps (stop pumps and rotary).
4. Shut-in Well with annular with HCR and choke in closed position.
5. Confirm shut-in.
6. Notify tool pusher/company representative.
7. Read and record the following:
 - a. SIDPP & SICP
 - b. Time of shut in
 - c. Pit gain
8. Regroup and identify forward plan. If pressure has increased to 2500 psi, confirm spacing and close the upper variable bore rams.
9. Prepare for well kill operation.

Tripping

1. Sound alarm (alert rig crew)
2. Stab full opening safety valve and close valve
3. Space out drill string
4. Shut in the well with the annular with HCR and choke in closed position
5. Confirm shut in
6. Notify tool pusher/company representative
7. Read and record the following
 - a. Time of shut in
 - b. SIDPP and SICP
 - c. Pit gain
8. If pressure has increased to 2500 psi, confirm spacing and close the upper most variable bore ram.
9. Prepare for well kill operation.

While Running Casing

1. Sound alarm (alert rig crew)
2. Stab crossover and full opening safety valve and close valve
3. Space out casing string
4. Shut in well with annular with HCR and choke in closed position
5. Confirm shut in
6. Notify tool pusher/company representative
7. Read and record the following:
 - a. SIDPP & SICP
 - b. Pit gain
 - c. Time
8. If pressure has increased to 2500 psi, confirm spacing and close the upper most variable bore ram.
9. Prepare for well kill operation.

No Pipe In Hole (Open Hole)

1. Sound alarm (alert rig crew)

2. Shut in blind rams with HCR and choke in closed position
3. Confirm shut in
4. Notify tool pusher/company representative
5. Read and record the following:
 - a. SICP
 - b. Pit gain
 - c. Time
6. Prepare for well kill operation

Pulling BHA thru Stack

1. Prior to pulling last joint of drill pipe thru the stack
 - a. Perform flow check, if flowing:
 - a.i. Sound Alarm (alert crew)
 - a.ii. Stab full opening safety valve and close valve
 - a.iii. Space out drill string
 - a.iv. Shut in using upper most VBR, choke and HCR in closed position
 - a.v. Confirm shut in
 - a.vi. Notify tool pusher/company representative.
 - a.vii. Read and record the following:
 - a.vii.1. SIDPP and SICP
 - a.vii.2. Pit gain
 - a.vii.3. Time
 - a.viii. Prepare for well kill operation
 2. With BHA in the stack:
 - a. If possible pull BHA clear of stack
 - a.i. Follow 'open hole' procedure above
 - b. If unable to pull BHA clear of stack
 - b.i. Stab crossover with full opening safety valve, close valve.
 - b.ii. Space out
 - b.iii. Shut in using upper most VBR. HCR and choke in closed position.
 - b.iv. Confirm shut in
 - b.v. Notify tool pusher/company rep
 - b.vi. Read and record the following:
 - b.vi.1. SIDPP and SICP
 - b.vi.2. Pit gain
 - b.vi.3. Time
 - b.vii. Prepare for well kill operation

TABLE
CAPACITY

Size O.D. In.	Wt. Per Ft. With Couplings Lb.	Inside Diameter In.	Drift Diameter In.	Gallons Per Lin. Ft.	Lin. Ft. Per Gallon
* 6 1/4	17.00	6.135	6.410	1.5356	5512
* 6 1/2	20.00	6.049	6.324	1.4929	6698
* 6 3/4	22.00	5.889	6.164	1.4634	6833
* 7	24.00	5.921	6.196	1.4304	6991
* 7 1/4	26.00	5.855	6.130	1.3987	7150
* 7 1/2	28.00	5.791	6.066	1.3683	7309
* 7 3/4	29.00	5.761	6.036	1.3541	7385
* 8	32.00	5.675	5.950	1.3140	7610
7	17.00	6.538	6.413	1.7440	5734
7 1/4	20.00	6.456	6.331	1.7005	5880
7 1/2	22.00	6.398	6.273	1.6701	5988
7 3/4	23.00	6.386	6.241	1.6535	6048
8	24.00	6.336	6.211	1.6379	6105
8 1/4	26.00	6.276	6.151	1.6070	6223
8 1/2	28.00	6.214	6.089	1.5754	6347
8 3/4	29.00	6.184	6.059	1.5603	6409
9	30.00	6.154	6.029	1.5452	6472
9 1/4	32.00	6.094	5.969	1.5152	6600
9 1/2	33.00	6.048	5.923	1.4924	6701
9 3/4	35.00	6.004	5.879	1.4708	6789
10	38.00	5.920	5.795	1.4299	6994
10 1/4	40.00	5.838	5.711	1.3896	7196
10 1/2	41.00	5.820	5.695	1.3820	7236
10 3/4	42.00	5.750	5.625	1.3490	7413
11	46.00	5.625	5.500	1.2914	7744
11 1/4	50.10	5.500	5.375	1.2342	8102
11 1/2	53.80	5.376	5.251	1.1792	8480
11 3/4	57.10	5.250	5.125	1.1246	8892
* 7 1/4	20.00	7.125	7.000	2.0712	4828
* 7 1/2	24.00	7.025	6.900	2.0135	4966
* 7 3/4	26.40	6.969	6.844	1.9815	5047
* 8	28.70	6.875	6.750	1.9394	5188
* 8 1/4	33.70	6.765	6.640	1.8672	5356
* 8 1/2	39.00	6.625	6.500	1.7907	5594
* 8 3/4	42.80	6.501	6.376	1.7243	5799
* 9	45.30	6.435	6.310	1.6895	5919
* 9 1/4	47.10	6.375	6.250	1.6581	6031
* 9 1/2	51.20	6.251	6.126	1.5943	6272
* 9 3/4	55.30	6.125	6.000	1.5306	6533
* 7 3/4	45.30	6.560	6.500	1.7558	5696
* 8	46.10	6.560	6.435	1.7558	5695
* 8 1/4	28.00	7.386	7.261	2.2258	4493
* 8 1/2	28.00	7.485	7.360	2.2858	4375
* 8 3/4	35.50	7.385	7.260	2.2252	4484
* 9	35.50	7.285	7.160	2.1653	4618
* 9 1/4	39.50	7.185	7.060	2.1053	4748
* 8 1/4	20.00	8.191	8.066	2.7374	3653
* 8 1/2	24.00	8.097	7.972	2.6749	3738
* 8 3/4	28.00	8.017	7.892	2.6223	3813
* 9	32.00	7.921	7.796	2.5599	3906
* 9 1/4	36.00	7.825	7.700	2.4982	4003
* 9 1/2	38.00	7.775	7.650	2.4654	4055
* 9 3/4	40.00	7.725	7.600	2.4383	4187
* 10	43.00	7.651	7.526	2.3883	4216
* 10 1/4	44.00	7.625	7.500	2.3721	4216
* 10 1/2	49.00	7.511	7.386	2.3017	4345

NO. 214
OF CASING

Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	Cu. Ft. Per Lin. Ft.	Lin. Ft. Per Cu. Ft.	Wt. Per Ft. With Couplings Lb.	Size O.D. In.
.0365	27.35	.2052	4.871	17.00	* 6 1/4
.0355	28.13	.1955	5.011	20.00	* 6 1/2
.0348	28.70	.1856	5.112	22.00	* 6 3/4
.0340	29.36	.1812	5.230	24.00	* 7
.0333	30.03	.1859	5.348	26.00	* 7 1/4
.0325	30.70	.1829	5.467	28.00	* 7 1/2
.0322	31.02	.1810	5.524	29.00	* 7 3/4
.0312	31.98	.1756	5.693	32.00	* 8
.0415	24.08	.2331	4.289	17.00	7
.0404	24.70	.2273	4.399	20.00	7 1/4
.0397	25.15	.2232	4.478	22.00	7 1/2
.0393	25.40	.2210	4.524	23.00	7 3/4
.0390	25.64	.2189	4.587	24.00	8
.0382	26.14	.2148	4.655	26.00	8 1/4
.0375	26.66	.2108	4.748	28.00	8 1/2
.0371	26.92	.2085	4.794	29.00	8 3/4
.0367	27.18	.2065	4.841	30.00	9
.0360	27.72	.2025	4.937	32.00	9 1/4
.0355	28.14	.1995	5.012	33.70	9 1/2
.0350	28.66	.1966	5.096	35.00	9 3/4
.0340	29.37	.1911	5.232	38.00	10
.0330	30.22	.1857	5.383	40.00	10 1/4
.0329	30.59	.1847	5.413	41.00	10 1/2
.0321	31.14	.1803	5.545	42.70	10 3/4
.0307	32.62	.1726	5.793	46.40	11
.0294	34.03	.1650	6.061	50.10	11 1/4
.0281	35.62	.1576	6.344	53.80	11 1/2
.0266	37.35	.1503	6.652	57.10	11 3/4
.0493	20.28	.2768	3.612	20.00	* 7 1/4
.0479	20.86	.2691	3.715	24.00	* 7 1/2
.0471	21.20	.2648	3.775	26.40	* 7 3/4
.0459	21.78	.2577	3.899	28.70	* 8
.0444	22.49	.2496	4.006	33.70	* 8 1/4
.0426	23.45	.2393	4.177	39.00	* 8 1/2
.0411	24.36	.2305	4.338	42.80	* 8 3/4
.0402	24.86	.2258	4.428	45.30	* 9
.0395	25.33	.2217	4.511	47.10	* 9 1/4
.0380	26.34	.2131	4.692	51.20	* 9 1/2
.0364	27.44	.2046	4.887	55.30	* 9 3/4
.0418	23.92	.2347	4.281	45.30	* 7 3/4
.0418	23.92	.2347	4.281	46.10	* 8
.0529	18.87	.2975	3.361	26.00	* 8 1/4
.0544	18.37	.3055	3.273	28.00	* 8 1/2
.0529	18.88	.2974	3.352	32.00	* 8 3/4
.0515	19.40	.2894	3.455	35.50	* 9
.0501	19.94	.2815	3.552	39.50	* 9 1/4
.0552	15.34	.3699	2.733	20.00	* 8 1/4
.0536	15.70	.3575	2.797	24.00	* 8 1/2
.0524	16.02	.3505	2.853	28.00	* 8 3/4
.0509	16.41	.3422	2.922	32.00	* 9
.0504	16.81	.3339	2.994	36.00	* 9 1/4
.0507	17.03	.3297	3.033	38.00	* 9 1/2
.0579	17.25	.3254	3.072	40.00	* 9 3/4
.0568	17.59	.3192	3.132	43.00	* 10
.0564	17.71	.3171	3.154	44.00	* 10 1/4
.0548	18.25	.3077	3.250	49.00	* 10 1/2

*Not API Standard. Shown for information only.

7.625 29.7# P-110 HC Stinger™

Pipe Body Data

Nominal OD	7.625	Inches
Wall Thickness	0.375	Inches
Weight	29.70	Lb/ft
PE Weight	29.04	Lb/ft
Nominal ID	6.875	Inches
Drift	6.750	Inches
Minimum Yield Strength	110,000	PSI
Minimum Tensile Strength	125,000	PSI
RBW	87.5%	Rating

Make-Up torques

Yield torque	25,960	LBS.
Max Operating Torque	23,600	LBS.
Max Make-Up	18,900	LBS.
Optimum Make-Up	17,200	LBS.
Minimum Make-Up	15,500	LBS.



Connection Data

Connection OD	7.625	Inches
Connection ID	6.875	Inches
Make-Up loss	3.030	Inches
Tension Efficiency	60%	Rating
Compression Efficiency	60%	Rating
Yield Strength in Tension	564,000	LBS.
Yield Strength in Compression	564,000	LBS.
MinYP (Burst)	7,570	PSI
Collapse Pressure	6,150	PSI
Uniaxial Bending	-	degrees

OFST SYNERGY SERVICE PACKAGE



Technical Sales Support: Rafael Escamilla Jr., Cell: 281-949-7704, jescamilla@ofstint.com

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DIMENSIONS AND

Size O.D. In.	Grade	Wt. Per Ft. With Cplg., Lb.	Inside Dia. In.	Thread & Cplg.		Extreme Line		Col/pse Resistance PSI
				Drift Dia. in.	O.D. of Cplg. In.	Drift Dia. in.	O.D. of Box In.	
5 1/2	T-95	29.70	4.376	4.251	—	—	—	17,430
	T-95	32.60	4.250	4.125	—	—	—	19,140
	T-95	35.30	4.126	4.001	—	—	—	20,760
	T-95	38.00	4.000	3.875	—	—	—	22,380
	T-95	40.50	3.876	3.751	—	—	—	23,920
	T-95	43.10	3.750	3.625	—	—	—	25,400
	HCP-110	17.00	4.892	4.767	6.050	4.653	5.860	8,580
	P-110	17.00	4.892	4.767	6.050	4.653	5.860	7,460
	P-110	20.00	4.778	4.653	6.050	4.653	5.860	11,080
	P-110	23.00	4.670	4.545	6.050	4.545	5.860	14,520
	P-110*	26.00	4.548	—	—	4.423	5.656†	17,390
	HCC-125+	17.00	4.892	4.767	—	—	—	8,580
	Q-125+	17.00	4.892	4.767	—	—	—	7,890
	Q-125+	20.00	4.778	4.653	—	—	—	12,080
	Q-125+	23.00	4.670	4.545	—	—	—	16,070
	Q-125+	26.00	4.548	4.423	—	—	—	19,770
	Q-125+	26.00	4.548	4.423	—	—	—	8,580
	LS-140+	17.00	4.892	4.767	—	—	—	12,950
	LS-140+	20.00	4.778	4.653	—	—	—	17,500
	LS-140+	23.00	4.670	4.545	—	—	—	13,460
	V-150	20.00	4.778	4.653	6.050	—	—	13,480
	V-150*	20.00	4.778	4.653	6.050	—	—	18,390
	V-150*	23.00	4.670	4.545	6.050	—	—	23,720
	V-150*	26.00	4.548	4.423	6.050	—	—	—



STRENGTHS OF CASING

Internal Yield Pressure PSI**				Body Yield Stph. 1,000 Lbs.	Joint Strength - 1000 Lbs.**			
Plan End or Ext. Line	Round Thread		But- tress Thd.		Threaded & Cplg. Joint			Ext. Line Joint
	Short	Long			Round Thread		But- tress Thd.	
					Short	Long		
16,990	—	—	—	528	—	—	—	—
18,810	—	—	—	909	—	—	—	—
20,770	—	—	—	987	—	—	—	—
22,670	—	—	—	1,063	—	—	—	—
24,540	—	—	—	1,136	—	—	—	—
26,450	—	—	—	1,208	—	—	—	—
10,640	—	10,640	10,640	546	—	445	568	—
10,640	—	10,640	10,640	546	—	445	568	620
12,640	—	12,640	12,360	641	—	548	667	654
14,520	—	13,580	12,360	729	—	643	724	722
16,660	—	—	—	—	569†	393††	564†	892††
12,090	—	12,090	12,090	620	—	481	620	—
12,090	—	12,090	12,090	620	—	481	620	—
14,360	—	14,360	14,050	729	—	592	728	—
16,510	—	15,430	14,050	829	—	694	782	—
18,930	—	15,430	14,050	939	—	808	782	—
13,540	—	13,540	13,540	695	—	534	890	—
16,080	—	16,080	15,740	816	—	657	810	—
18,490	—	17,290	15,740	928	—	771	869	—
17,230	—	17,230	16,860	874	—	701	865	—
—	—	17,230	16,860	874	—	701	908	—
—	—	18,520	16,860	994	—	823	910	—
—	—	22,720	—	—	—	—	—	722†
11,870	—	9,880	8,990	612	—	—	—	—

DIMENSIONS AND

Size O.D. In.	Grade	Wt. Per Ft. With Cplg. Lb.	Inside Dia. In.	Thread & Cplg.		Extreme Line		Collapse Resistance PSI
				Drift Dia. In.	O.D. of Cplg. In.	Drift Dia. In.	O.D. of Box In.	
5	C-75*	20.30	4.184	—	—	4.059	5.094	11,240
	C-75*	23.20	4.044	—	—	3.919	5.094†	12,970
	HCL-80+	15.00	4.408	4.283	—	—	—	9,390
	HCL-80+	18.00	4.276	4.151	—	—	—	11,880
	HCL-80+	23.20	4.044	3.919	—	—	—	15,820
	HCN-80+	15.00	4.408	4.283	—	—	—	9,380
	HCN-80+	18.00	4.276	4.151	—	—	—	11,680
	HCN-80+	23.20	4.044	3.919	—	—	—	15,820
	L-80	15.00	4.408	4.283	—	—	—	7,250
	L-80	24.10	4.000	3.875	—	—	—	14,400
	L-80	18.00	4.276	4.151	—	—	—	10,500
	L-80	21.40	4.126	4.001	—	—	—	12,760
	L-80	23.20	4.044	3.919	—	—	—	13,830
	N-80	15.00	4.408	4.283	5.563	4.151	5.360	7,250
	N-80	18.00	4.276	4.151	5.563	4.151	5.360	10,490
	N-80	20.30	4.184	—	—	4.059	5.250	11,990
	N-80	23.20	4.044	—	—	3.919	5.094†	13,830
	N-80	21.40	4.126	4.001	—	—	—	12,760
	N-80	24.10	4.000	3.875	—	—	—	14,400
	C-90	15.00	4.408	4.233	—	—	—	7,840
	C-90	18.00	4.276	4.151	—	—	—	11,530
	C-90	21.40	4.126	4.001	—	—	—	14,360
	C-90	23.20	4.044	3.919	—	—	—	15,560
	C-90	24.10	4.000	3.875	—	—	—	16,200
	C-95	15.00	4.408	4.283	5.563	4.151	5.360	8,090
	C-95	18.00	4.276	4.151	5.563	4.151	5.360	12,010
	C-95	20.30	4.184	—	—	4.059	5.250	14,250
	C-95	23.20	4.044	—	—	3.919	5.094†	16,430
	C-95	21.40	4.126	4.001	—	—	—	15,160
	C-95	24.10	4.000	3.875	—	—	—	17,100
	S-95+	15.00	4.408	4.283	—	—	—	9,380
	S-95+	18.00	4.276	4.151	—	—	—	12,030
	S-95+	23.20	4.044	3.919	—	—	—	16,430
	T-95	15.00	4.408	4.283	—	—	—	8,110
	T-95	18.00	4.276	4.151	—	—	—	12,030
	T-95	21.40	4.126	4.001	—	—	—	15,160
	T-95	23.20	4.044	3.919	—	—	—	16,430
	T-95	24.10	4.000	3.875	—	—	—	17,100
	P-110	15.00	4.408	4.283	5.563	4.151	5.360	8,830
	P-110	18.00	4.276	4.151	5.563	4.151	5.360	13,450
	D-110	20.30	4.184	—	—	4.059	5.094†	16,490

NO. 203

STRENGTHS OF CASING

Plain End or Ext. Line	Internal Yield Pressure PSI**			Body Yield Stgth. 1,000 Lbs.	Joint Strength - 1000 Lbs.**			
	Round Thread		But- tress Thd.		Threaded & Cplg. Joint			Ext. Line Joint
	Short	Long			Round Thread		But- tress Thd.	
					Short	Long		
10,710	—	—	—	—	369†	—	—	529††
12,550	—	—	—	—	369†	—	—	529††
8,290	—	8,290	8,290	—	—	311	408	—
10,140	—	10,140	9,910	422	—	396	492	—
13,380	—	10,810	9,910	543	—	540	516	—
8,290	—	8,290	8,290	350	—	311	408	—
10,140	—	10,140	9,910	422	—	396	492	—
13,380	—	10,810	9,910	543	—	540	537	—
8,290	—	8,290	8,290	350	—	295	379	—
14,000	—	10,810	9,910	566	—	538	510	—
10,140	—	10,140	9,910	422	—	377	457	—
12,240	—	10,810	9,910	501	—	466	510	—
13,380	—	10,810	9,910	543	—	513	510	—
8,290	—	8,290	8,290	350	—	311	396	437
10,140	—	10,140	9,910	422	—	396	477	469
11,420	—	—	—	—	388†	284††	363†	556††
13,380	—	—	—	—	388†	284††	363†	556††
12,240	—	10,810	9,910	501	—	490	537	—
14,000	—	10,810	9,910	566	—	558	537	—
9,320	—	9,320	9,320	394	—	311	404	—
11,400	—	11,400	11,150	475	—	396	484	—
13,770	—	12,170	11,150	564	—	490	537	—
15,060	—	12,170	11,150	611	—	540	537	—
15,750	—	12,170	11,150	636	—	567	537	—
9,840	—	9,840	9,840	416	—	326	424	459
12,040	—	12,040	11,770	501	—	416	512	493
13,560	—	—	—	—	—	—	—	584††
15,890	—	—	—	—	—	—	—	584††
14,530	—	12,840	11,770	595	—	515	563	—
16,630	—	12,840	11,770	672	—	595	563	—
9,840	—	9,840	9,840	416	—	342	441	—
12,040	—	12,040	11,770	501	—	436	532	—
15,890	—	12,840	11,770	645	—	594	590	—
9,840	—	9,840	9,840	416	—	326	424	—
12,040	—	12,040	11,770	501	—	416	512	—
14,530	—	12,840	11,770	595	—	515	563	—
15,890	—	12,840	11,770	645	—	567	563	—
16,630	—	12,840	11,770	672	—	595	563	—
11,400	—	11,400	11,400	481	—	388	503	547
13,940	—	13,940	13,620	580	—	495	606	587
15,710	—	—	—	—	—	—	—	—



BTA Oil Producers, LLC
104 S Pecos
Midland, TX 79701

WELL: Rojo 7811 34 - 27 Fed Com #21H

TVD: 12309

MD: 20004

DRILLING PLAN

Casing Program

Hole Size	Csg. Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	1000	0	1000	No	40.5	J-55	STC	3.7	7.3	15.5	10.4	Dry	8.3
9 7/8	7 5/8	0	8014	0	8000	yes	29.7	P110	Buttress	1.4	2.4	3.9	4.0	Dry	9.4
8 3/4	7 5/8	8014	11785	8000	11771	yes	29.7	P110	FJ	1.7	1.6	2.7	2.7	Dry	9.4
6 3/4	5 1/2	0	11585	0	11571	Yes	20	P110	Buttress	1.3	1.5	2.8	2.9	Dry	14
6 3/4	5	11585	20004	11571	12309	Yes	18	P110	Buttress	1.3	1.4	1.6	1.7	Dry	14

*7 5/8" has DV Tool @ 4916'



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DRILLING PLAN

Casing Program

Hole Size	Csg. Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	1000	0	1000	No	40.5	J-55	STC	3.7	7.3	15.5	10.4	Dry	8.3
9 7/8	7 5/8	0	8014	0	8000	yes	29.7	P110	Buttress	1.4	2.4	3.9	4.0	Dry	9.4
8 3/4	7 5/8	8014	11785	8000	11771	yes	29.7	P110	FJ	1.7	1.6	2.7	2.7	Dry	9.4
6 3/4	5 1/2	0	11585	0	11571	Yes	20	P110	Buttress	1.3	1.5	2.8	2.9	Dry	14
6 3/4	5	11585	20004	11571	12309	Yes	18	P110	Buttress	1.3	1.4	1.6	1.7	Dry	14

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DRILLING PLAN

Casing Program

Hole Size	Csg. Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	1000	0	1000	No	40.5	J-55	STC	3.7	7.3	15.5	10.4	Dry	8.3
9 7/8	7 5/8	0	8014	0	8000	yes	29.7	P110	Buttress	1.4	2.4	3.9	4.0	Dry	9.4
8 3/4	7 5/8	8014	11785	8000	11771	yes	29.7	P110	FJ	1.7	1.6	2.7	2.7	Dry	9.4
6 3/4	5 1/2	0	11585	0	11571	Yes	20	P110	Buttress	1.3	1.5	2.8	2.9	Dry	14
6 3/4	5	11585	20004	11571	12309	Yes	18	P110	Buttress	1.3	1.4	1.6	1.7	Dry	14

*7 5/8" has DV Tool @ 4916'



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Midland, TX 79701

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TVD: 12309

MD: 20004

DRILLING PLAN

Casing Program

Hole Size	Csg. Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	1000	0	1000	No	40.5	J-55	STC	3.7	7.3	15.5	10.4	Dry	8.3
9 7/8	7 5/8	0	8014	0	8000	yes	29.7	P110	Buttress	1.4	2.4	3.9	4.0	Dry	9.4
8 3/4	7 5/8	8014	11785	8000	11771	yes	29.7	P110	FJ	1.7	1.6	2.7	2.7	Dry	9.4
6 3/4	5 1/2	0	11585	0	11571	Yes	20	P110	Buttress	1.3	1.5	2.8	2.9	Dry	14
6 3/4	5	11585	20004	11571	12309	Yes	18	P110	Buttress	1.3	1.4	1.6	1.7	Dry	14

*7 5/8" has DV Tool @ 4916'



BTA Oil Producers, LLC
104 S Pecos
Midland, TX 79701

WELL: Rojo 7811 34 - 27 Fed Com #21H

TVD: 12309

MD: 20004

DRILLING PLAN

Casing Program

Hole Size	Csg. Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	1000	0	1000	No	40.5	J-55	STC	3.7	7.3	15.5	10.4	Dry	8.3
9 7/8	7 5/8	0	8014	0	8000	yes	29.7	P110	Buttress	1.4	2.4	3.9	4.0	Dry	9.4
8 3/4	7 5/8	8014	11785	8000	11771	yes	29.7	P110	FJ	1.7	1.6	2.7	2.7	Dry	9.4
6 3/4	5 1/2	0	11585	0	11571	Yes	20	P110	Buttress	1.3	1.5	2.8	2.9	Dry	14
6 3/4	5	11585	20004	11571	12309	Yes	18	P110	Buttress	1.3	1.4	1.6	1.7	Dry	14

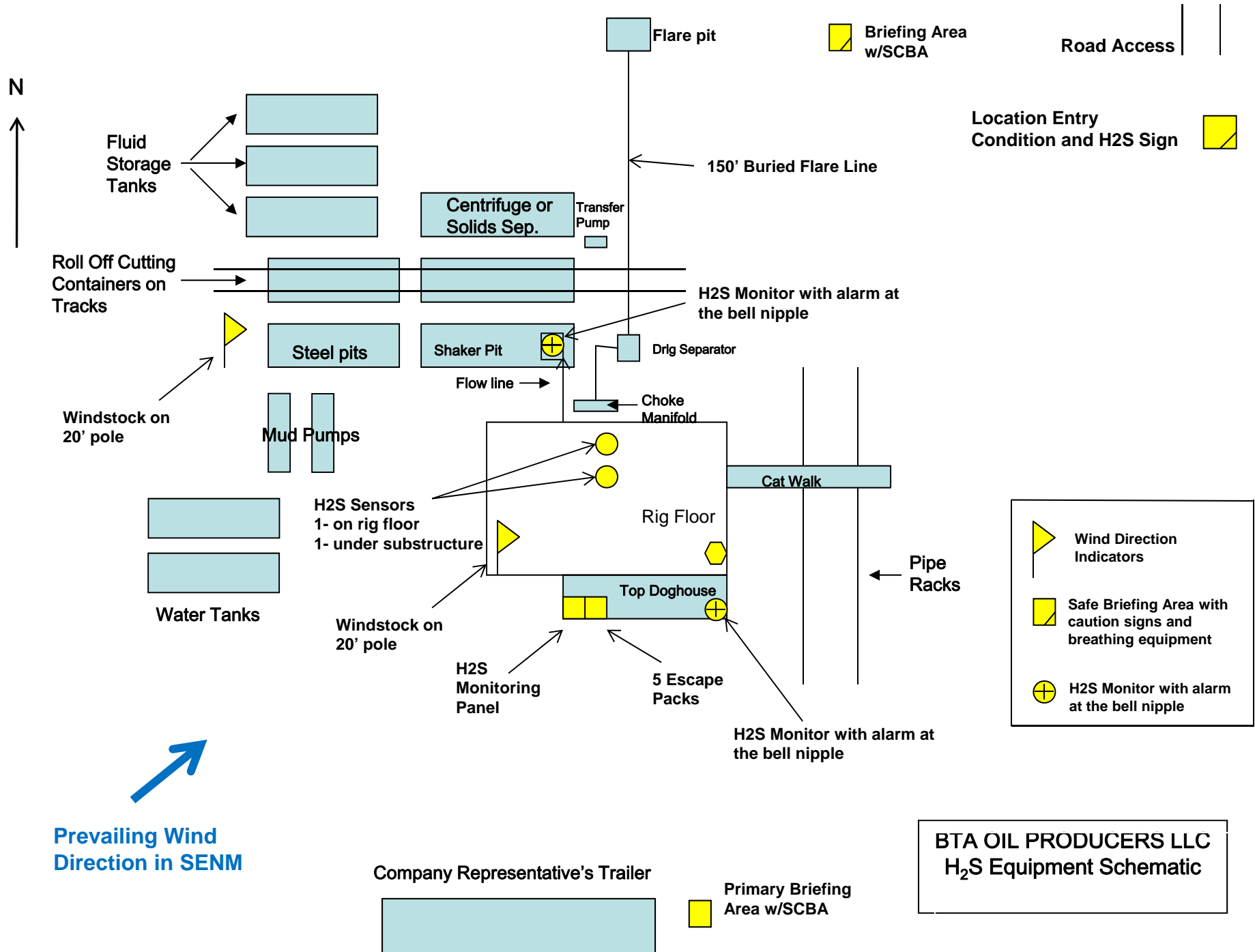
*7 5/8" has DV Tool @ 4916'

EMERGENCY CALL LIST

	<u>OFFICE</u>	<u>MOBILE</u>
BTA Oil Producers LLC OFFICE	432-682-3753	
BEN GRIMES, Operations	432-682-3753	432-559-4309
NICK EATON, Drilling	432-682-3753	432-260-7841
TRACE WOHLFAHRT, Completions	432-682-3753	

EMERGENCY RESPONSE NUMBERS

	<u>OFFICE</u>
STATE POLICE	575-748-9718
EDDY COUNTY SHERIFF	575-746-2701
EMERGENCY MEDICAL SERVICES (AMBULANCE)	911 or 575-746-2701
EDDY COUNTY EMERGENCY MANAGEMENT (HARRY BURGESS)	575-887-9511
STATE EMERGENCY RESPONSE CENTER (SERC)	575-476-9620
CARLSBAD POLICE DEPARTMENT	575-885-2111
CARLSBAD FIRE DEPARTMENT	575-885-3125
NEW MEXICO OIL CONSERVATION DIVISION	575-748-1283
INDIAN FIRE & SAFETY	800-530-8693
HALLIBURTON SERVICES	800-844-8451



BTA OIL PRODUCERS LLC



HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- a. The hazards and characteristics of hydrogen sulfide (H₂S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- d. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- a. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- c. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

2. H₂S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S. If H₂S greater than 100 ppm is encountered in the gas stream we will shut in and install H₂S equipment.

- a. Well Control Equipment:
 - Flare line.
 - Choke manifold with remotely operated choke.
 - Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.
- b. Protective equipment for essential personnel:
 - Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
- c. H₂S detection and monitoring equipment:

- 2 - portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
- d. Visual warning systems:
Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.
 - e. Mud Program:
The mud program has been designed to minimize the volume of H2S circulated to the surface.
 - f. Metallurgy:
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
 - g. Communication:
Company vehicles equipped with cellular telephone.

W A R N I N G

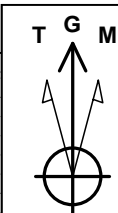
**YOU ARE ENTERING AN H₂S AREA
AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED***
- 2. HARD HATS REQUIRED***
- 3. SMOKING IN DESIGNATED AREAS ONLY***
- 4. BE WIND CONSCIOUS AT ALL TIMES***
- 5. CK WITH BTA OIL PRODUCERS LLC FOREMAN AT MAIN OFFICE***

BTA OIL PRODUCERS LLC

1-432-682-3753

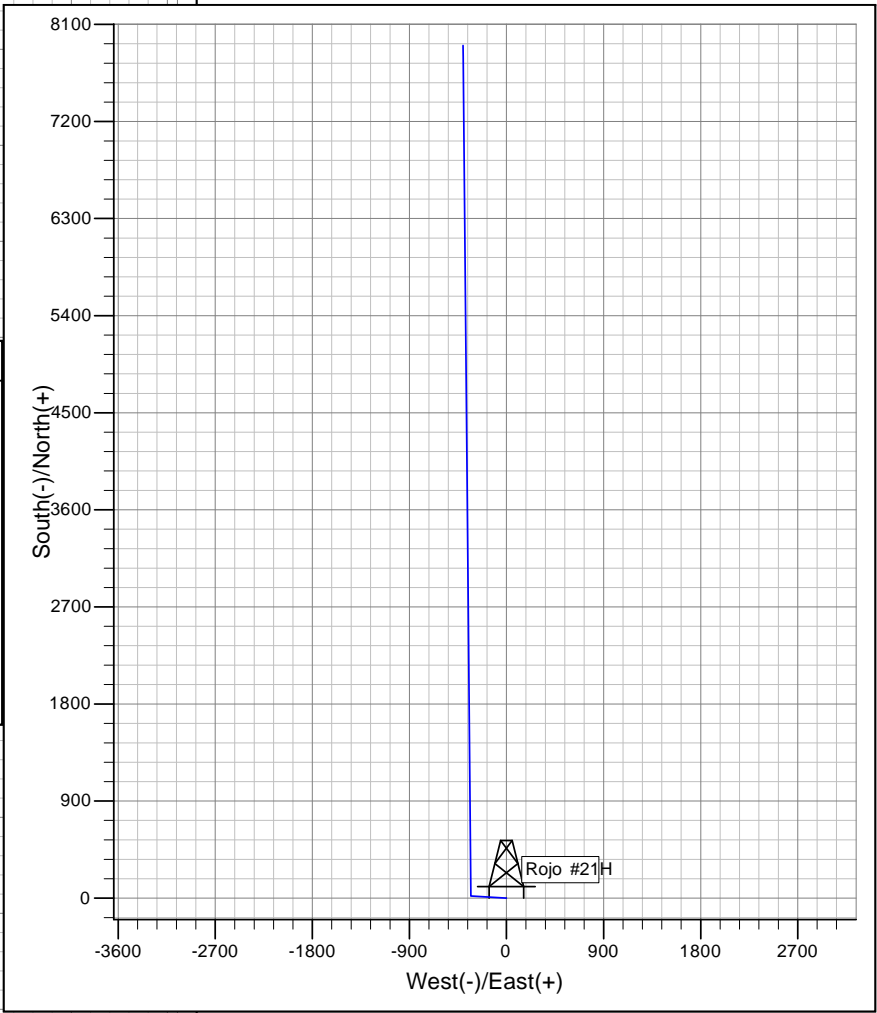
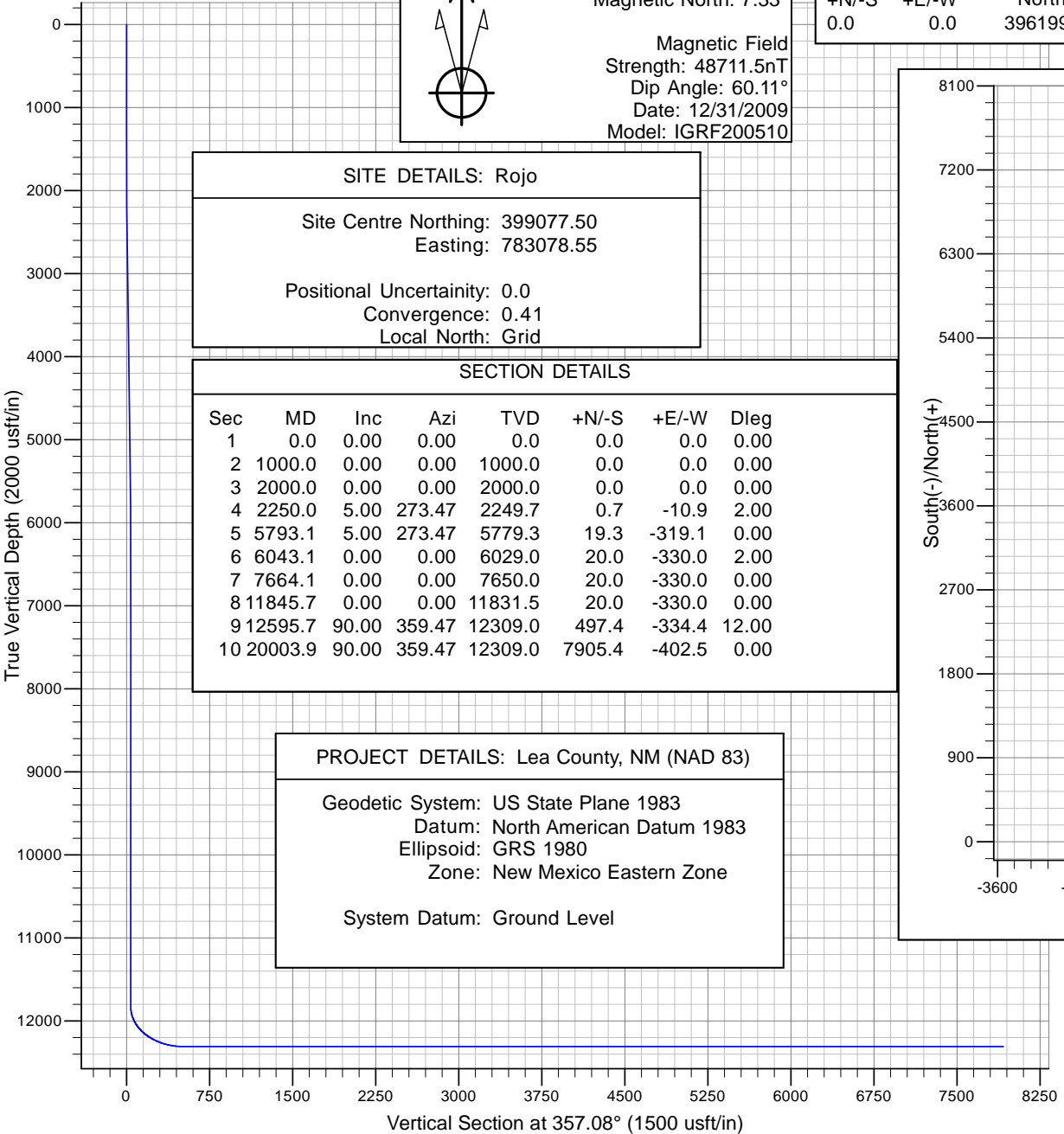
BTA Oil Producers, LLC



Azimuths to Grid North
True North: -0.41°
Magnetic North: 7.33°

Magnetic Field
Strength: 48711.5nT
Dip Angle: 60.11°
Date: 12/31/2009
Model: IGRF200510

WELL DETAILS: Rojo #21H					
		Ground Level	Ground Level:	3323.0	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	396199.80	778791.90	32° 5' 12.886 N	103° 33' 59.788 W



BTA Oil Producers, LLC

Lea County, NM (NAD 83)

Rojo

Rojo #21H

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

21 November, 2019

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #21H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3323.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3323.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Lea County, NM (NAD 83), Lea County, NM		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site		Rojo			
Site Position:		Northing:	399,077.50 usft	Latitude:	32° 5' 41.057 N
From:	Map	Easting:	783,078.55 usft	Longitude:	103° 33' 9.721 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well	Rojo #21H					
Well Position	+N/-S	0.0 usft	Northing:	396,199.80 usft	Latitude:	32° 5' 12.886 N
	+E/-W	0.0 usft	Easting:	778,791.90 usft	Longitude:	103° 33' 59.788 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,323.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.74	60.11	48,711.45513368

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	357.08

Plan Survey Tool Program	Date	11/21/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	20,003.9 Design #1 (Wellbore #1)		

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #21H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3323.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3323.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,250.0	5.00	273.47	2,249.7	0.7	-10.9	2.00	2.00	0.00	273.47	
5,793.1	5.00	273.47	5,779.3	19.3	-319.1	0.00	0.00	0.00	0.00	
6,043.1	0.00	0.00	6,029.0	20.0	-330.0	2.00	-2.00	0.00	180.00	
7,664.1	0.00	0.00	7,650.0	20.0	-330.0	0.00	0.00	0.00	0.00	
11,845.7	0.00	0.00	11,831.5	20.0	-330.0	0.00	0.00	0.00	0.00	
12,595.7	90.00	359.47	12,309.0	497.4	-334.4	12.00	12.00	0.00	359.47	
20,003.9	90.00	359.47	12,309.0	7,905.4	-402.5	0.00	0.00	0.00	0.00	Rojo #21H BHL

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #21H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3323.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3323.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
100.0	0.00	0.00	100.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
200.0	0.00	0.00	200.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
300.0	0.00	0.00	300.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
400.0	0.00	0.00	400.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
500.0	0.00	0.00	500.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
600.0	0.00	0.00	600.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
700.0	0.00	0.00	700.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
800.0	0.00	0.00	800.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
900.0	0.00	0.00	900.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	396,199.80	778,791.90	32° 5' 12.886 N	103° 33' 59.788 W
2,100.0	2.00	273.47	2,100.0	0.1	-1.7	396,199.90	778,790.16	32° 5' 12.887 N	103° 33' 59.808 W
2,200.0	4.00	273.47	2,199.8	0.4	-7.0	396,200.22	778,784.93	32° 5' 12.890 N	103° 33' 59.869 W
2,250.0	5.00	273.47	2,249.7	0.7	-10.9	396,200.46	778,781.02	32° 5' 12.893 N	103° 33' 59.915 W
2,300.0	5.00	273.47	2,299.5	0.9	-15.2	396,200.72	778,776.67	32° 5' 12.896 N	103° 33' 59.965 W
2,400.0	5.00	273.47	2,399.1	1.5	-23.9	396,201.25	778,767.97	32° 5' 12.902 N	103° 34' 0.066 W
2,500.0	5.00	273.47	2,498.7	2.0	-32.6	396,201.78	778,759.27	32° 5' 12.907 N	103° 34' 0.167 W
2,600.0	5.00	273.47	2,598.4	2.5	-41.3	396,202.30	778,750.57	32° 5' 12.913 N	103° 34' 0.268 W
2,700.0	5.00	273.47	2,698.0	3.0	-50.0	396,202.83	778,741.87	32° 5' 12.919 N	103° 34' 0.369 W
2,800.0	5.00	273.47	2,797.6	3.6	-58.7	396,203.36	778,733.17	32° 5' 12.925 N	103° 34' 0.470 W
2,900.0	5.00	273.47	2,897.2	4.1	-67.4	396,203.89	778,724.47	32° 5' 12.931 N	103° 34' 0.572 W
3,000.0	5.00	273.47	2,996.8	4.6	-76.1	396,204.41	778,715.77	32° 5' 12.937 N	103° 34' 0.673 W
3,100.0	5.00	273.47	3,096.4	5.1	-84.8	396,204.94	778,707.07	32° 5' 12.942 N	103° 34' 0.774 W
3,200.0	5.00	273.47	3,196.1	5.7	-93.5	396,205.47	778,698.37	32° 5' 12.948 N	103° 34' 0.875 W
3,300.0	5.00	273.47	3,295.7	6.2	-102.2	396,205.99	778,689.67	32° 5' 12.954 N	103° 34' 0.976 W
3,400.0	5.00	273.47	3,395.3	6.7	-110.9	396,206.52	778,680.97	32° 5' 12.960 N	103° 34' 1.077 W
3,500.0	5.00	273.47	3,494.9	7.3	-119.6	396,207.05	778,672.27	32° 5' 12.966 N	103° 34' 1.178 W
3,600.0	5.00	273.47	3,594.5	7.8	-128.3	396,207.58	778,663.57	32° 5' 12.972 N	103° 34' 1.279 W
3,700.0	5.00	273.47	3,694.2	8.3	-137.0	396,208.10	778,654.88	32° 5' 12.977 N	103° 34' 1.380 W
3,800.0	5.00	273.47	3,793.8	8.8	-145.7	396,208.63	778,646.18	32° 5' 12.983 N	103° 34' 1.481 W
3,900.0	5.00	273.47	3,893.4	9.4	-154.4	396,209.16	778,637.48	32° 5' 12.989 N	103° 34' 1.582 W
4,000.0	5.00	273.47	3,993.0	9.9	-163.1	396,209.68	778,628.78	32° 5' 12.995 N	103° 34' 1.683 W
4,100.0	5.00	273.47	4,092.6	10.4	-171.8	396,210.21	778,620.08	32° 5' 13.001 N	103° 34' 1.784 W
4,200.0	5.00	273.47	4,192.3	10.9	-180.5	396,210.74	778,611.38	32° 5' 13.006 N	103° 34' 1.885 W
4,300.0	5.00	273.47	4,291.9	11.5	-189.2	396,211.27	778,602.68	32° 5' 13.012 N	103° 34' 1.987 W
4,400.0	5.00	273.47	4,391.5	12.0	-197.9	396,211.79	778,593.98	32° 5' 13.018 N	103° 34' 2.088 W
4,500.0	5.00	273.47	4,491.1	12.5	-206.6	396,212.32	778,585.28	32° 5' 13.024 N	103° 34' 2.189 W
4,600.0	5.00	273.47	4,590.7	13.0	-215.3	396,212.85	778,576.58	32° 5' 13.030 N	103° 34' 2.290 W
4,700.0	5.00	273.47	4,690.4	13.6	-224.0	396,213.38	778,567.88	32° 5' 13.036 N	103° 34' 2.391 W
4,800.0	5.00	273.47	4,790.0	14.1	-232.7	396,213.90	778,559.18	32° 5' 13.041 N	103° 34' 2.492 W
4,900.0	5.00	273.47	4,889.6	14.6	-241.4	396,214.43	778,550.48	32° 5' 13.047 N	103° 34' 2.593 W
5,000.0	5.00	273.47	4,989.2	15.2	-250.1	396,214.96	778,541.78	32° 5' 13.053 N	103° 34' 2.694 W
5,100.0	5.00	273.47	5,088.8	15.7	-258.8	396,215.48	778,533.08	32° 5' 13.059 N	103° 34' 2.795 W
5,200.0	5.00	273.47	5,188.5	16.2	-267.5	396,216.01	778,524.38	32° 5' 13.065 N	103° 34' 2.896 W
5,300.0	5.00	273.47	5,288.1	16.7	-276.2	396,216.54	778,515.69	32° 5' 13.071 N	103° 34' 2.997 W

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #21H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3323.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3323.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,400.0	5.00	273.47	5,387.7	17.3	-284.9	396,217.07	778,506.99	32° 5' 13.076 N	103° 34' 3.098 W	
5,500.0	5.00	273.47	5,487.3	17.8	-293.6	396,217.59	778,498.29	32° 5' 13.082 N	103° 34' 3.199 W	
5,600.0	5.00	273.47	5,586.9	18.3	-302.3	396,218.12	778,489.59	32° 5' 13.088 N	103° 34' 3.300 W	
5,700.0	5.00	273.47	5,686.6	18.8	-311.0	396,218.65	778,480.89	32° 5' 13.094 N	103° 34' 3.402 W	
5,793.1	5.00	273.47	5,779.3	19.3	-319.1	396,219.14	778,472.79	32° 5' 13.099 N	103° 34' 3.496 W	
5,800.0	4.86	273.47	5,786.2	19.4	-319.7	396,219.17	778,472.20	32° 5' 13.100 N	103° 34' 3.503 W	
5,900.0	2.86	273.47	5,885.9	19.8	-326.4	396,219.58	778,465.47	32° 5' 13.104 N	103° 34' 3.581 W	
6,000.0	0.86	273.47	5,985.9	20.0	-329.7	396,219.78	778,462.23	32° 5' 13.106 N	103° 34' 3.618 W	
6,043.1	0.00	0.00	6,029.0	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
6,100.0	0.00	0.00	6,085.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
6,200.0	0.00	0.00	6,185.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
6,300.0	0.00	0.00	6,285.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
6,400.0	0.00	0.00	6,385.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
6,500.0	0.00	0.00	6,485.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
6,600.0	0.00	0.00	6,585.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
6,700.0	0.00	0.00	6,685.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
6,800.0	0.00	0.00	6,785.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
6,900.0	0.00	0.00	6,885.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
7,000.0	0.00	0.00	6,985.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
7,100.0	0.00	0.00	7,085.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
7,200.0	0.00	0.00	7,185.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
7,300.0	0.00	0.00	7,285.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
7,400.0	0.00	0.00	7,385.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
7,500.0	0.00	0.00	7,485.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
7,600.0	0.00	0.00	7,585.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
7,664.1	0.00	0.00	7,650.0	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
7,700.0	0.00	0.00	7,685.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
7,800.0	0.00	0.00	7,785.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
7,900.0	0.00	0.00	7,885.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
8,000.0	0.00	0.00	7,985.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
8,100.0	0.00	0.00	8,085.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
8,200.0	0.00	0.00	8,185.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
8,300.0	0.00	0.00	8,285.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
8,400.0	0.00	0.00	8,385.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
8,500.0	0.00	0.00	8,485.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
8,600.0	0.00	0.00	8,585.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
8,700.0	0.00	0.00	8,685.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
8,800.0	0.00	0.00	8,785.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
8,900.0	0.00	0.00	8,885.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
9,000.0	0.00	0.00	8,985.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
9,100.0	0.00	0.00	9,085.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
9,200.0	0.00	0.00	9,185.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
9,300.0	0.00	0.00	9,285.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
9,400.0	0.00	0.00	9,385.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
9,500.0	0.00	0.00	9,485.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
9,600.0	0.00	0.00	9,585.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
9,700.0	0.00	0.00	9,685.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
9,800.0	0.00	0.00	9,785.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
9,900.0	0.00	0.00	9,885.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
10,000.0	0.00	0.00	9,985.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
10,100.0	0.00	0.00	10,085.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
10,200.0	0.00	0.00	10,185.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
10,300.0	0.00	0.00	10,285.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
10,400.0	0.00	0.00	10,385.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
10,500.0	0.00	0.00	10,485.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #21H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3323.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3323.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
10,600.0	0.00	0.00	10,585.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
10,700.0	0.00	0.00	10,685.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
10,800.0	0.00	0.00	10,785.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
10,900.0	0.00	0.00	10,885.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
11,000.0	0.00	0.00	10,985.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
11,100.0	0.00	0.00	11,085.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
11,200.0	0.00	0.00	11,185.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
11,300.0	0.00	0.00	11,285.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
11,400.0	0.00	0.00	11,385.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
11,500.0	0.00	0.00	11,485.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
11,600.0	0.00	0.00	11,585.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
11,700.0	0.00	0.00	11,685.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
11,800.0	0.00	0.00	11,785.9	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
11,845.7	0.00	0.00	11,831.5	20.0	-330.0	396,219.80	778,461.91	32° 5' 13.107 N	103° 34' 3.622 W	
11,900.0	6.52	359.47	11,885.8	23.1	-330.0	396,222.89	778,461.88	32° 5' 13.137 N	103° 34' 3.622 W	
12,000.0	18.52	359.47	11,983.2	44.7	-330.2	396,244.53	778,461.68	32° 5' 13.351 N	103° 34' 3.623 W	
12,100.0	30.52	359.47	12,074.0	86.2	-330.6	396,285.95	778,461.30	32° 5' 13.761 N	103° 34' 3.624 W	
12,200.0	42.52	359.47	12,154.2	145.6	-331.2	396,345.35	778,460.75	32° 5' 14.349 N	103° 34' 3.625 W	
12,300.0	54.52	359.47	12,220.4	220.3	-331.8	396,420.13	778,460.06	32° 5' 15.089 N	103° 34' 3.627 W	
12,400.0	66.52	359.47	12,269.5	307.2	-332.6	396,507.02	778,459.26	32° 5' 15.949 N	103° 34' 3.629 W	
12,500.0	78.52	359.47	12,299.5	402.4	-333.5	396,602.22	778,458.39	32° 5' 16.891 N	103° 34' 3.631 W	
12,595.7	90.00	359.47	12,309.0	497.4	-334.4	396,697.23	778,457.51	32° 5' 17.831 N	103° 34' 3.634 W	
12,600.0	90.00	359.47	12,309.0	501.8	-334.4	396,701.58	778,457.47	32° 5' 17.874 N	103° 34' 3.634 W	
12,700.0	90.00	359.47	12,309.0	601.8	-335.4	396,801.57	778,456.55	32° 5' 18.864 N	103° 34' 3.636 W	
12,800.0	90.00	359.47	12,309.0	701.8	-336.3	396,901.56	778,455.63	32° 5' 19.853 N	103° 34' 3.639 W	
12,900.0	90.00	359.47	12,309.0	801.8	-337.2	397,001.56	778,454.71	32° 5' 20.843 N	103° 34' 3.641 W	
13,000.0	90.00	359.47	12,309.0	901.8	-338.1	397,101.55	778,453.79	32° 5' 21.832 N	103° 34' 3.644 W	
13,100.0	90.00	359.47	12,309.0	1,001.8	-339.0	397,201.54	778,452.87	32° 5' 22.822 N	103° 34' 3.646 W	
13,200.0	90.00	359.47	12,309.0	1,101.8	-340.0	397,301.54	778,451.95	32° 5' 23.812 N	103° 34' 3.648 W	
13,300.0	90.00	359.47	12,309.0	1,201.8	-340.9	397,401.53	778,451.03	32° 5' 24.801 N	103° 34' 3.651 W	
13,400.0	90.00	359.47	12,309.0	1,301.8	-341.8	397,501.52	778,450.11	32° 5' 25.791 N	103° 34' 3.653 W	
13,500.0	90.00	359.47	12,309.0	1,401.8	-342.7	397,601.52	778,449.19	32° 5' 26.780 N	103° 34' 3.656 W	
13,600.0	90.00	359.47	12,309.0	1,501.7	-343.6	397,701.51	778,448.27	32° 5' 27.770 N	103° 34' 3.658 W	
13,700.0	90.00	359.47	12,309.0	1,601.7	-344.6	397,801.50	778,447.35	32° 5' 28.759 N	103° 34' 3.661 W	
13,800.0	90.00	359.47	12,309.0	1,701.7	-345.5	397,901.50	778,446.43	32° 5' 29.749 N	103° 34' 3.663 W	
13,900.0	90.00	359.47	12,309.0	1,801.7	-346.4	398,001.49	778,445.51	32° 5' 30.738 N	103° 34' 3.666 W	
14,000.0	90.00	359.47	12,309.0	1,901.7	-347.3	398,101.48	778,444.59	32° 5' 31.728 N	103° 34' 3.668 W	
14,100.0	90.00	359.47	12,309.0	2,001.7	-348.2	398,201.47	778,443.67	32° 5' 32.717 N	103° 34' 3.670 W	
14,200.0	90.00	359.47	12,309.0	2,101.7	-349.2	398,301.47	778,442.75	32° 5' 33.707 N	103° 34' 3.673 W	
14,300.0	90.00	359.47	12,309.0	2,201.7	-350.1	398,401.46	778,441.83	32° 5' 34.696 N	103° 34' 3.675 W	
14,400.0	90.00	359.47	12,309.0	2,301.7	-351.0	398,501.45	778,440.91	32° 5' 35.686 N	103° 34' 3.678 W	
14,500.0	90.00	359.47	12,309.0	2,401.7	-351.9	398,601.45	778,439.99	32° 5' 36.676 N	103° 34' 3.680 W	
14,600.0	90.00	359.47	12,309.0	2,501.7	-352.8	398,701.44	778,439.07	32° 5' 37.665 N	103° 34' 3.683 W	
14,700.0	90.00	359.47	12,309.0	2,601.7	-353.8	398,801.43	778,438.15	32° 5' 38.655 N	103° 34' 3.685 W	
14,800.0	90.00	359.47	12,309.0	2,701.7	-354.7	398,901.43	778,437.23	32° 5' 39.644 N	103° 34' 3.688 W	
14,900.0	90.00	359.47	12,309.0	2,801.7	-355.6	399,001.42	778,436.31	32° 5' 40.634 N	103° 34' 3.690 W	
15,000.0	90.00	359.47	12,309.0	2,901.7	-356.5	399,101.41	778,435.39	32° 5' 41.623 N	103° 34' 3.692 W	
15,100.0	90.00	359.47	12,309.0	3,001.7	-357.4	399,201.41	778,434.47	32° 5' 42.613 N	103° 34' 3.695 W	
15,200.0	90.00	359.47	12,309.0	3,101.7	-358.4	399,301.40	778,433.55	32° 5' 43.602 N	103° 34' 3.697 W	
15,300.0	90.00	359.47	12,309.0	3,201.7	-359.3	399,401.39	778,432.63	32° 5' 44.592 N	103° 34' 3.700 W	
15,400.0	90.00	359.47	12,309.0	3,301.7	-360.2	399,501.39	778,431.71	32° 5' 45.581 N	103° 34' 3.702 W	
15,500.0	90.00	359.47	12,309.0	3,401.7	-361.1	399,601.38	778,430.79	32° 5' 46.571 N	103° 34' 3.705 W	
15,600.0	90.00	359.47	12,309.0	3,501.7	-362.0	399,701.37	778,429.87	32° 5' 47.560 N	103° 34' 3.707 W	
15,700.0	90.00	359.47	12,309.0	3,601.7	-363.0	399,801.37	778,428.95	32° 5' 48.550 N	103° 34' 3.710 W	
15,800.0	90.00	359.47	12,309.0	3,701.7	-363.9	399,901.36	778,428.03	32° 5' 49.539 N	103° 34' 3.712 W	

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #21H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3323.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3323.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
15,900.0	90.00	359.47	12,309.0	3,801.7	-364.8	400,001.35	778,427.11	32° 5' 50.529 N	103° 34' 3.714 W	
16,000.0	90.00	359.47	12,309.0	3,901.6	-365.7	400,101.34	778,426.19	32° 5' 51.519 N	103° 34' 3.717 W	
16,100.0	90.00	359.47	12,309.0	4,001.6	-366.6	400,201.34	778,425.27	32° 5' 52.508 N	103° 34' 3.719 W	
16,200.0	90.00	359.47	12,309.0	4,101.6	-367.6	400,301.33	778,424.35	32° 5' 53.498 N	103° 34' 3.722 W	
16,300.0	90.00	359.47	12,309.0	4,201.6	-368.5	400,401.32	778,423.43	32° 5' 54.487 N	103° 34' 3.724 W	
16,400.0	90.00	359.47	12,309.0	4,301.6	-369.4	400,501.32	778,422.51	32° 5' 55.477 N	103° 34' 3.727 W	
16,500.0	90.00	359.47	12,309.0	4,401.6	-370.3	400,601.31	778,421.59	32° 5' 56.466 N	103° 34' 3.729 W	
16,600.0	90.00	359.47	12,309.0	4,501.6	-371.2	400,701.30	778,420.67	32° 5' 57.456 N	103° 34' 3.731 W	
16,700.0	90.00	359.47	12,309.0	4,601.6	-372.2	400,801.30	778,419.75	32° 5' 58.445 N	103° 34' 3.734 W	
16,800.0	90.00	359.47	12,309.0	4,701.6	-373.1	400,901.29	778,418.83	32° 5' 59.435 N	103° 34' 3.736 W	
16,900.0	90.00	359.47	12,309.0	4,801.6	-374.0	401,001.28	778,417.91	32° 6' 0.424 N	103° 34' 3.739 W	
17,000.0	90.00	359.47	12,309.0	4,901.6	-374.9	401,101.28	778,416.99	32° 6' 1.414 N	103° 34' 3.741 W	
17,100.0	90.00	359.47	12,309.0	5,001.6	-375.8	401,201.27	778,416.07	32° 6' 2.403 N	103° 34' 3.744 W	
17,200.0	90.00	359.47	12,309.0	5,101.6	-376.8	401,301.26	778,415.15	32° 6' 3.393 N	103° 34' 3.746 W	
17,300.0	90.00	359.47	12,309.0	5,201.6	-377.7	401,401.26	778,414.23	32° 6' 4.382 N	103° 34' 3.749 W	
17,400.0	90.00	359.47	12,309.0	5,301.6	-378.6	401,501.25	778,413.31	32° 6' 5.372 N	103° 34' 3.751 W	
17,500.0	90.00	359.47	12,309.0	5,401.6	-379.5	401,601.24	778,412.39	32° 6' 6.362 N	103° 34' 3.753 W	
17,600.0	90.00	359.47	12,309.0	5,501.6	-380.4	401,701.23	778,411.47	32° 6' 7.351 N	103° 34' 3.756 W	
17,700.0	90.00	359.47	12,309.0	5,601.6	-381.4	401,801.23	778,410.55	32° 6' 8.341 N	103° 34' 3.758 W	
17,800.0	90.00	359.47	12,309.0	5,701.6	-382.3	401,901.22	778,409.63	32° 6' 9.330 N	103° 34' 3.761 W	
17,900.0	90.00	359.47	12,309.0	5,801.6	-383.2	402,001.21	778,408.71	32° 6' 10.320 N	103° 34' 3.763 W	
18,000.0	90.00	359.47	12,309.0	5,901.6	-384.1	402,101.21	778,407.79	32° 6' 11.309 N	103° 34' 3.766 W	
18,100.0	90.00	359.47	12,309.0	6,001.6	-385.0	402,201.20	778,406.87	32° 6' 12.299 N	103° 34' 3.768 W	
18,200.0	90.00	359.47	12,309.0	6,101.6	-386.0	402,301.19	778,405.95	32° 6' 13.288 N	103° 34' 3.771 W	
18,300.0	90.00	359.47	12,309.0	6,201.6	-386.9	402,401.19	778,405.03	32° 6' 14.278 N	103° 34' 3.773 W	
18,400.0	90.00	359.47	12,309.0	6,301.5	-387.8	402,501.18	778,404.11	32° 6' 15.267 N	103° 34' 3.775 W	
18,500.0	90.00	359.47	12,309.0	6,401.5	-388.7	402,601.17	778,403.19	32° 6' 16.257 N	103° 34' 3.778 W	
18,600.0	90.00	359.47	12,309.0	6,501.5	-389.6	402,701.17	778,402.27	32° 6' 17.246 N	103° 34' 3.780 W	
18,700.0	90.00	359.47	12,309.0	6,601.5	-390.6	402,801.16	778,401.35	32° 6' 18.236 N	103° 34' 3.783 W	
18,800.0	90.00	359.47	12,309.0	6,701.5	-391.5	402,901.15	778,400.43	32° 6' 19.225 N	103° 34' 3.785 W	
18,900.0	90.00	359.47	12,309.0	6,801.5	-392.4	403,001.15	778,399.51	32° 6' 20.215 N	103° 34' 3.788 W	
19,000.0	90.00	359.47	12,309.0	6,901.5	-393.3	403,101.14	778,398.59	32° 6' 21.205 N	103° 34' 3.790 W	
19,100.0	90.00	359.47	12,309.0	7,001.5	-394.2	403,201.13	778,397.67	32° 6' 22.194 N	103° 34' 3.792 W	
19,200.0	90.00	359.47	12,309.0	7,101.5	-395.2	403,301.12	778,396.75	32° 6' 23.184 N	103° 34' 3.795 W	
19,300.0	90.00	359.47	12,309.0	7,201.5	-396.1	403,401.12	778,395.83	32° 6' 24.173 N	103° 34' 3.797 W	
19,400.0	90.00	359.47	12,309.0	7,301.5	-397.0	403,501.11	778,394.91	32° 6' 25.163 N	103° 34' 3.800 W	
19,500.0	90.00	359.47	12,309.0	7,401.5	-397.9	403,601.10	778,393.99	32° 6' 26.152 N	103° 34' 3.802 W	
19,600.0	90.00	359.47	12,309.0	7,501.5	-398.8	403,701.10	778,393.07	32° 6' 27.142 N	103° 34' 3.805 W	
19,700.0	90.00	359.47	12,309.0	7,601.5	-399.8	403,801.09	778,392.15	32° 6' 28.131 N	103° 34' 3.807 W	
19,800.0	90.00	359.47	12,309.0	7,701.5	-400.7	403,901.08	778,391.23	32° 6' 29.121 N	103° 34' 3.810 W	
19,900.0	90.00	359.47	12,309.0	7,801.5	-401.6	404,001.08	778,390.31	32° 6' 30.110 N	103° 34' 3.812 W	
20,000.0	90.00	359.47	12,309.0	7,901.5	-402.5	404,101.07	778,389.39	32° 6' 31.100 N	103° 34' 3.814 W	
20,003.9	90.00	359.47	12,309.0	7,905.4	-402.5	404,104.95	778,389.36	32° 6' 31.138 N	103° 34' 3.815 W	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Rojo #21H BHL	0.00	0.07	12,309.0	7,905.4	-402.5	404,104.95	778,389.36	32° 6' 31.138 N	103° 34' 3.815 W	
- hit/miss target										
- Shape										
- Point										

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #21H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3323.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3323.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

BOP Break Testing Request

BTA requests permission to allow BOP Break Testing under the following conditions:

- After a full BOP test is conducted on the first well on the pad.
- When skidding to drill a hole section that does not penetrate into the Wolfcamp.
- Full BOP test will be required prior to drilling any production hole.



TOTAL LENGTH = 78'-3/8"

TUBING SPOOL

SW-TCM

13-5/8" 5M x 7-1/16" 10M
5-1/2" PP SEAL
w/ (2) 1-13/16" 10M SSO

SW-MB SPOOL ASSEMBLY

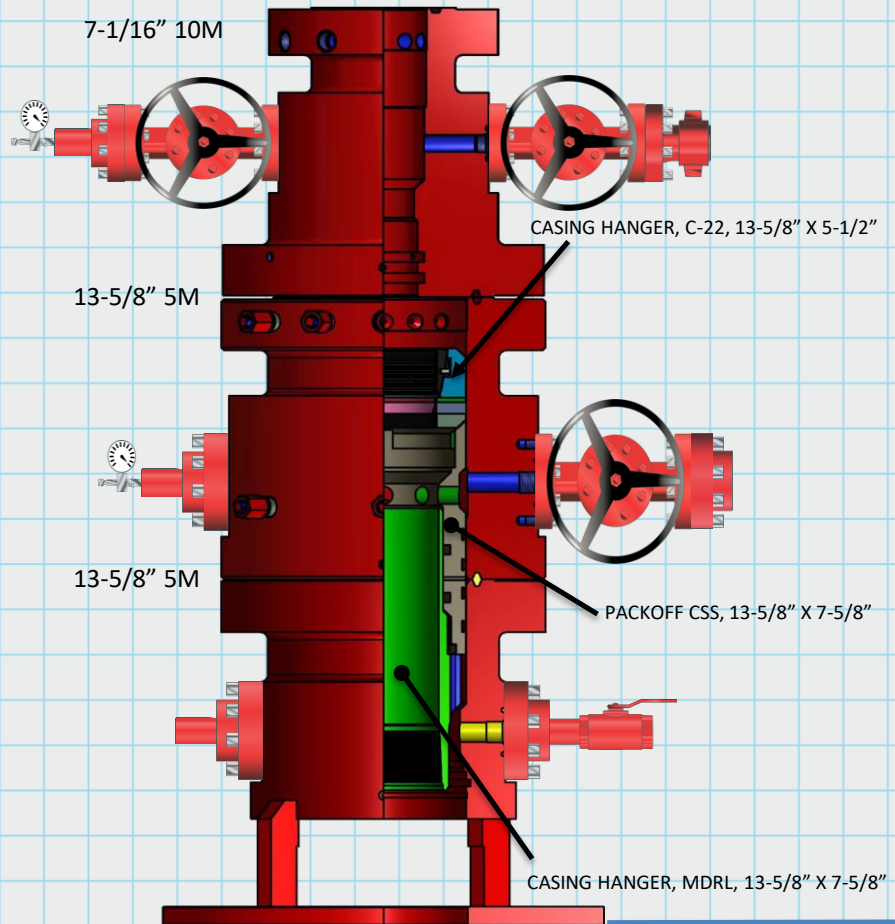
UPPER MBH

13-5/8" 5M x 13-5/8" 5M
w/ (2) 2-1/16" 5M SSO

CASING HEAD ASSEMBLY

LOWER MBH

13-5/8" 5M x 10-3/4" SOW
w/ (2) 2-1/16" 5M SSO



10-3/4" SOW x 7-5/8" x 5-1/2"



APD ID: 10400054749

Submission Date: 03/03/2020

Highlighted data
reflects the most
recent changes

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

10842_Rojo_21H_Vicinity_Map_and_topo_20200302140945.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? NO

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

0842_Rojo_21H_1_Mile_Radius_20200302141046.pdf

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? DEFER

Estimated Production Facilities description: CTB will be sundried at a later date.

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: OTHER

Describe type: PIT

Water source use type: STIMULATION
SURFACE CASING
DUST CONTROL
INTERMEDIATE/PRODUCTION
CASING

Source latitude:

Source longitude:

Source datum:

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING

Source land ownership: FEDERAL

Source transportation land ownership: PRIVATE

Water source volume (barrels): 100000

Source volume (acre-feet): 12.88930963

Source volume (gal): 4200000

Water source and transportation map:

Rojo_20H_and_21H_Water_Transportation_Map_20200302091416.pdf

Water source comments: Water Pit is in NWNW Quarter Quarter of Sec 3, T26S, R33E in Lea County, NM

New water well? N

New Water Well Info

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: Caliche used for construction of the drilling pad and access road will be obtained from the closest existing caliche pit as approved by the BLM or from prevailing deposits found under the location. If there is not sufficient material available, caliche will be purchased from the nearest caliche pit located in the SWSW Quarter Quarter of Section 3 T26S R33E Lea County, NM.

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drilling fluids and cuttings.

Amount of waste: 4164 barrels

Waste disposal frequency : One Time Only

Safe containment description: All drilling fluids will be stored safely and disposed of properly.

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

Disposal type description:

Disposal location description: Trucked to a state approved disposal facility.

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Waste type: SEWAGE

Waste content description: Human waste and grey water.

Amount of waste: 1000 gallons

Waste disposal frequency : One Time Only

Safe containment description: Waste material will be stored safely and disposed of properly.

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

Disposal type description:

Disposal location description: Trucked to a state approved disposal facility.

Waste type: GARBAGE

Waste content description: Trash

Amount of waste: 500 pounds

Waste disposal frequency : One Time Only

Safe containment description: Trash produced during drilling and completion operations will be collected in a trash container and disposed of properly.

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

Disposal type description:

Disposal location description: Trucked to a state approved disposal facility.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? N

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Description of cuttings location

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Rig_Layout_20190930140859.pdf

0842_Rojo_21H_well_site_plan_20200302141647.pdf

Comments: This will be in the exact same location as the previously permitted ROJO 7811 34-27 FED COM 20H and 21H Pad.

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: ROJO 7811 34-27 FED COM

Multiple Well Pad Number: 20H AND 21H

Recontouring attachment:

Drainage/Erosion control construction: During construction proper erosion control methods will be used to control erosion, runoff, and siltation of the surrounding area.

Drainage/Erosion control reclamation: Proper erosion control methods will be used on the area to control erosion, runoff, and siltation of the surrounding area.

Well pad proposed disturbance (acres): 3.95

Road proposed disturbance (acres):

Powerline proposed disturbance (acres): 0

Pipeline proposed disturbance (acres):

Other proposed disturbance (acres): 0

Well pad interim reclamation (acres): 0 **Well pad long term disturbance (acres):** 0

Road interim reclamation (acres): 0 **Road long term disturbance (acres):** 0

Powerline interim reclamation (acres): 0 **Powerline long term disturbance (acres):** 0

Pipeline interim reclamation (acres): 0 **Pipeline long term disturbance (acres):** 0

Other interim reclamation (acres): 0 **Other long term disturbance (acres):** 0

Total interim reclamation: 0

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Total proposed disturbance: 3.95

Total long term disturbance: 0

Disturbance Comments: This pad will be on the same, previously constructed pad, as the MESA 8105 JV P #31H.

Reconstruction method: The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations.

Soil treatment: To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

Existing Vegetation at the well pad: The historic climax plant community is a grassland dominated by black grama, dropseeds, and blue stems with sand sage and shinnery oak distributed evenly throughout. Current landscape displays mesquite, shinnery oak, yucca, desert sage, fourwing saltbush, snakeweed, and bunch grasses.

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Refer to "Existing Vegetation at the well pad"

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: Refer to "Existing Vegetation at the well pad"

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: Refer to "Existing Vegetation at the well pad"

Existing Vegetation Community at other disturbances attachment:

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation?

Seed harvest description:

Seed harvest description attachment:

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Seed Management

Seed Table

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre
-----------	-------------

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Chad

Last Name: Smith

Phone: (432)682-3753

Email: csmith@btaoil.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: No invasive species present. Standard regular maintenance to maintain a clear location and road.

Weed treatment plan attachment:

Monitoring plan description: Identify areas supporting weeds prior to construction; prevent the introduction and spread of weeds from construction equipment during construction; and contain weed seeds and propagules by preventing segregated topsoil from being spread to adjacent areas. No invasive species present. Standard regular maintenance to maintain a clear location and road.

Monitoring plan attachment:

Success standards: To maintain all disturbed areas as per Gold Book standards.

Pit closure description: N/A

Pit closure attachment:

Section 11 - Surface Ownership

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Section 12 - Other Information

Right of Way needed? N

Use APD as ROW?

ROW Type(s):

ROW Applications

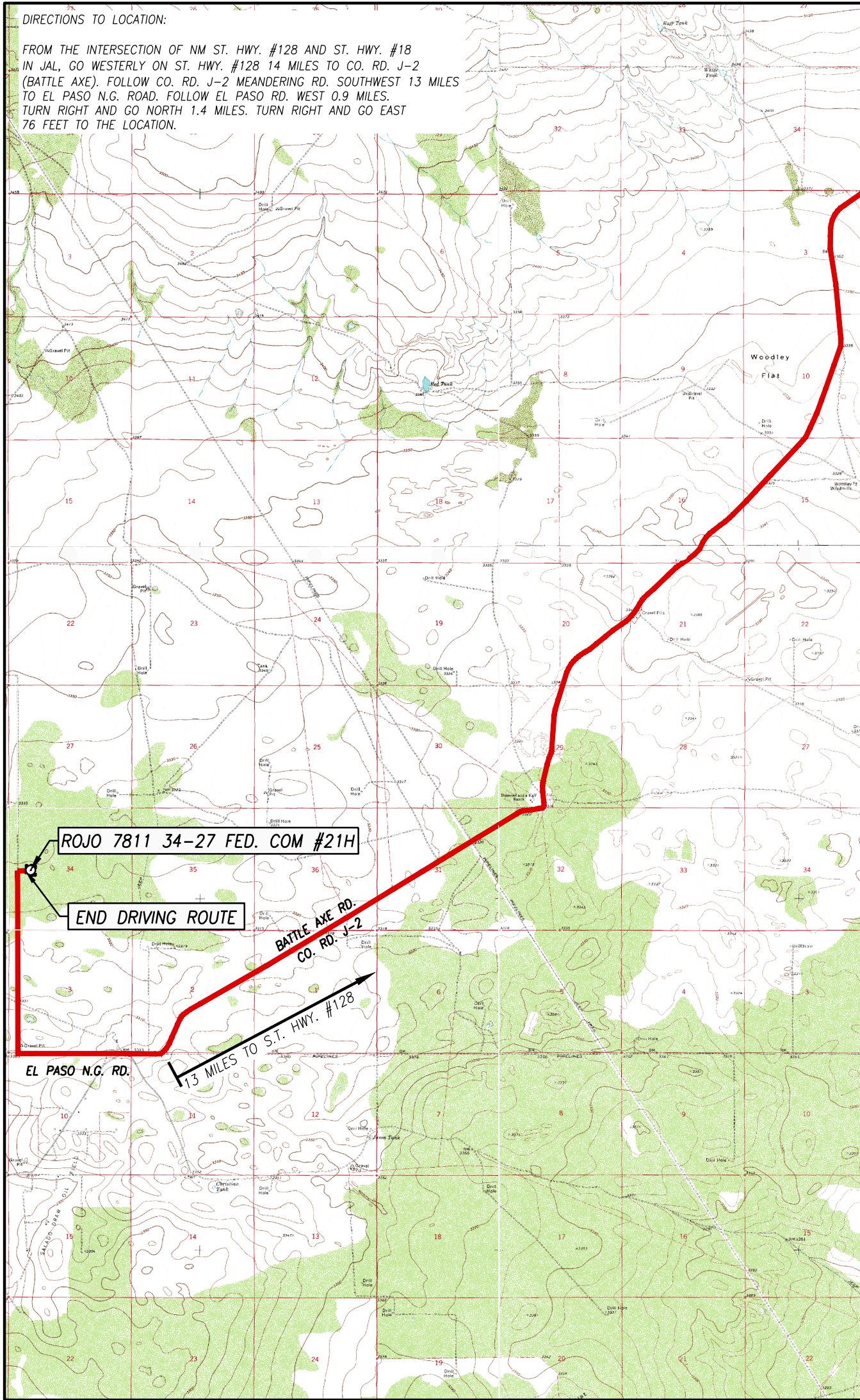
SUPO Additional Information: This pad will be in the same exact location as the previously approved ROJO 7811 34-27 FED COM 20H and 21H

Use a previously conducted onsite? Y

Previous Onsite information: No onsite needed, per BLM NRS McKenna Ryder. This pad will be in the same exact location as the previously approved ROJO 7811 34-27 FED COM 20H and 21H

Other SUPO Attachment

VICINITY, TOPOGRAPHIC AND ACCESS ROAD MAP



SEC. 34 TWP. 25-S RGE. 33-E
COUNTY LEA STATE NEW MEXICO
DESCRIPTION 2600' FSL & 660' FWL
ELEVATION 3325'
OPERATOR BTA OIL PRODUCERS, LLC
LEASE ROJO 7811 34-27 FEDERAL COM
U.S.G.S. TOPOGRAPHIC MAP
PADUCCA BREAKS EAST, N.M. SURVEY N.M.P.M.

SCALE: 1" = 1 MILE

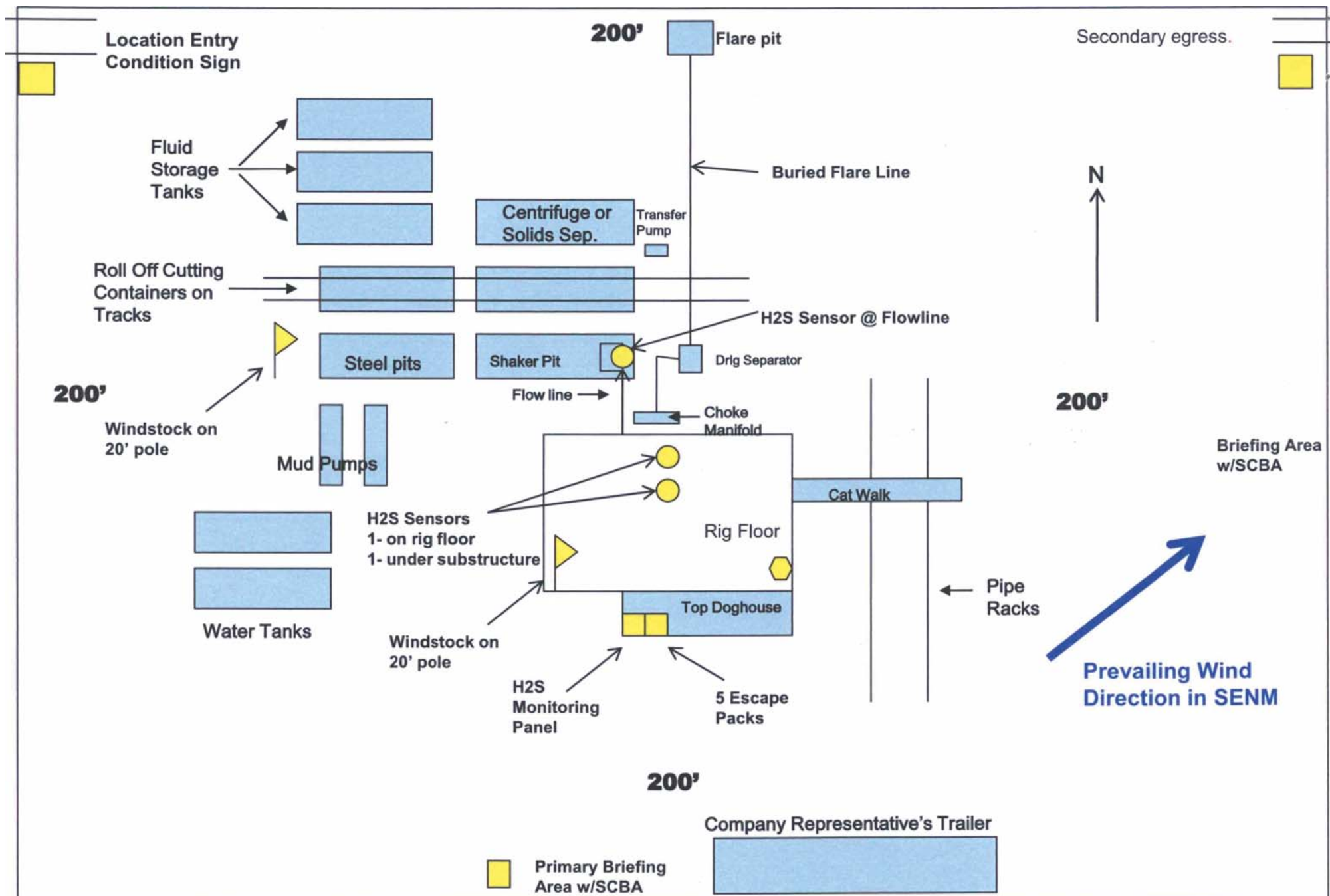
CONTOUR INTERVAL:
PADUCCA BREAKS EAST, N.M. - 10'

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz
TBPLS# 10021000

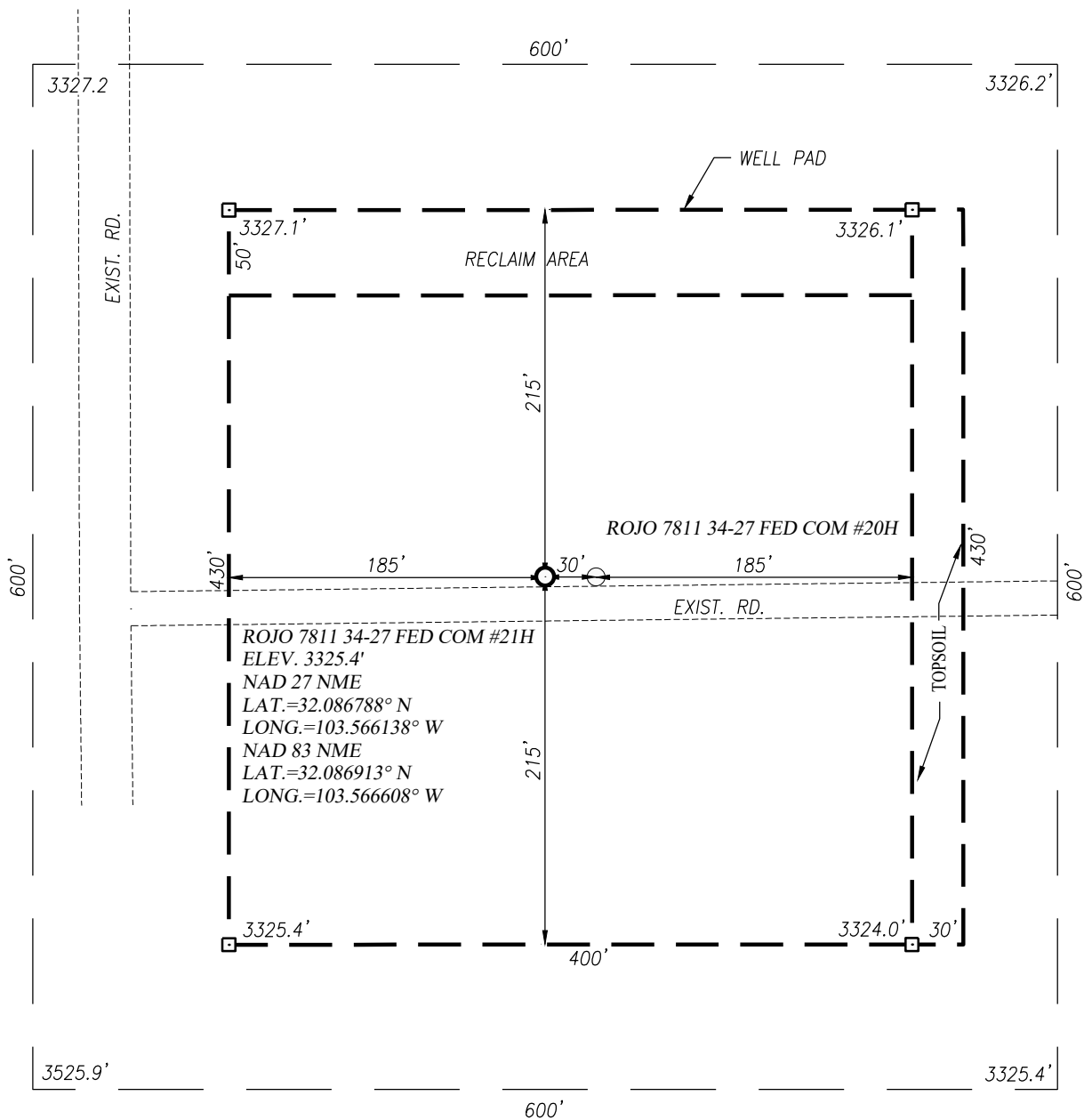


BTA OIL PRODUCERS, LLC
WATER TRANSPORTATION MAP
ROJO 7811 34-27 FED COM 20H and 21H WELL PAD TO WATER PIT
SEC 34 ; T25S ; R33E – SEC 3 ; T26S ; R33E (Water Pit is in NWNW QUARTER QUARTER)
LEA COUNTY, NM





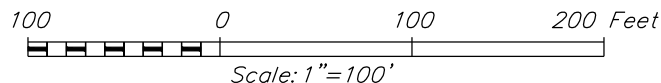
WELL SITE PLAN



1) SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR ACCESS ROAD LOCATION.

DIRECTIONS TO LOCATION:

FROM THE INTERSECTION OF NM ST. HWY. #128 AND ST. HWY. #18 IN JAL, GO WESTERLY ON ST. HWY. #128 14 MILES TO CO. RD. J-2 (BATTLE AXE). FOLLOW CO. RD. J-2 MEANDERING RD. SOUTHWEST 13 MILES TO EL PASO N.G. ROAD. FOLLOW EL PASO RD. WEST 0.9 MILES. TURN RIGHT AND GO NORTH 1.4 MILES. TURN RIGHT AND GO EAST 76 FEET TO THE LOCATION.



BTA OIL PRODUCERS, LLC

ROJO 7811 34-27 FED COM #21H WELL LOCATED 2600 FEET
FROM THE SOUTH LINE AND 660 FEET FROM THE WEST LINE
OF SECTION 34, TOWNSHIP 25 SOUTH, RANGE 33 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz
TBPLS# 10021000

Survey Date: 07/22/19

CAD Date: 08/29/19

Drawn By: LSL

W.O. No.: 19110842

Rev: .

Rel. W.O.: 19110753

Sheet 1 of 1



APD ID: 10400054749

Submission Date: 03/03/2020

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres):

PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number:

Injection well name:

Assigned injection well API number?

Injection well API number:

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:



U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Bond Info Data Report

07/15/2020

APD ID: 10400054749

Submission Date: 03/03/2020

Highlighted data
reflects the most
recent changes

Operator Name: BTA OIL PRODUCERS LLC

Well Name: ROJO 7811 34-27 FED COM

Well Number: 21H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB001711

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

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, New Mexico 87505

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

OCD - HOBBS
07/27/2020
RECEIVED

☐ AMENDED REPORT

30-025-47461

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 98094	Pool Name BOBCAT DRAW ; UPPER WOLFCAMP
Property Code 320524	Property Name ROJO 7811 34-27 FED COM	Well Number 21H
OGRID No. 260297	Operator Name BTA OIL PRODUCERS, LLC	Elevation 3325'

Surface Location

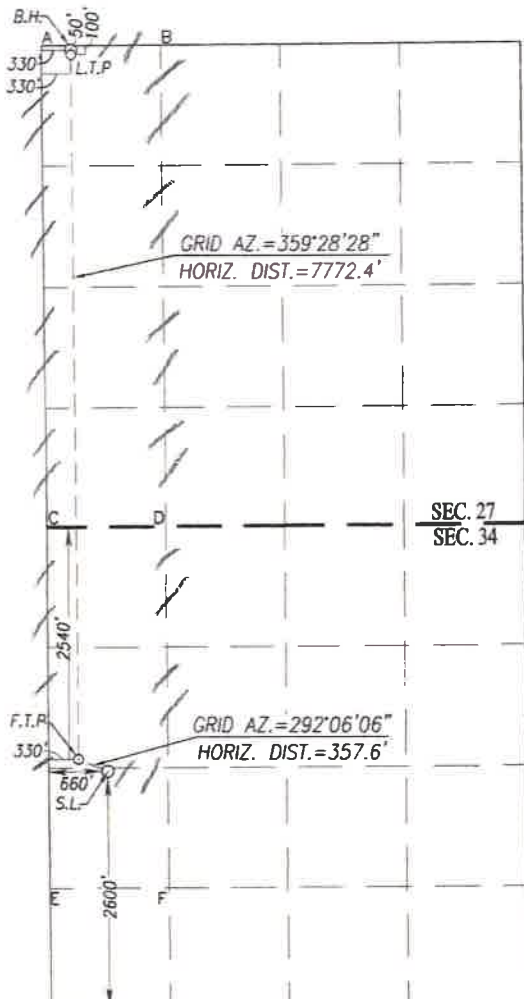
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	34	25-S	33-E		2600	SOUTH	660	WEST	LEA

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
D	27	25-S	33-E		50	NORTH	330	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
240			

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



SCALE: 1"=2000'

BOTTOM HOLE LOCATION	BOTTOM HOLE LOCATION
NAD 27 NME	NAD 83 NME
Y= 404047.2 N	Y= 404104.9 N
X= 737203.1 E	X= 778389.4 E
LAT.=32.108525° N	LAT.=32.108649° N
LONG.=103.567255° W	LONG.=103.567726° W
LAST TAKE POINT	LAST TAKE POINT
NAD 27 NME	NAD 83 NME
Y= 403997.2 N	Y= 404055.0 N
X= 737203.6 E	X= 778389.9 E
LAT.=32.108387° N	LAT.=32.108512° N
LONG.=103.567255° W	LONG.=103.567726° W

CORNER COORDINATES TABLE

NAD 27 NME

A - Y= 404095.0 N, X= 736872.7 E
B - Y= 404103.8 N, X= 738199.0 E
C - Y= 398814.0 N, X= 736921.4 E
D - Y= 398822.6 N, X= 738243.9 E
E - Y= 394858.9 N, X= 736957.7 E
F - Y= 394866.1 N, X= 738279.6 E

CORNER COORDINATES TABLE

NAD 83 NME

A - Y= 404152.8 N, X= 778059.0 E
B - Y= 404161.5 N, X= 779385.3 E
C - Y= 398871.6 N, X= 778107.9 E
D - Y= 398880.1 N, X= 779430.4 E
E - Y= 394916.4 N, X= 778144.4 E
F - Y= 394923.6 N, X= 779466.4 E

FIRST TAKE POINT

NAD 27 NME

Y= 396276.8 N
X= 737274.0 E
LAT.=32.087164° N
LONG.=103.567204° W

FIRST TAKE POINT

NAD 83 NME

Y= 396334.3 N
X= 778460.7 E
LAT.=32.087289° N
LONG.=103.567674° W

GEODETIC COORDINATES

NAD 27 NME

SURFACE LOCATION
Y= 396142.3 N
X= 737605.2 E
LAT.=32.086788° N
LONG.=103.566138° W

GEODETIC COORDINATES

NAD 83 NME

SURFACE LOCATION
Y= 396199.8 N
X= 778791.9 E
LAT.=32.086913° N
LONG.=103.566608° W

OPERATOR CERTIFICATION

I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Sammy Hajar
Signature
Sammy Hajar

12/10/2019

Date

Printed Name

SHAJAR@BTAOIL.COM

E-mail Address

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.

JULY 23, 2019

Date of Survey

Signature & Seal of Professional Surveyor

Ronald J. Eidson
Professional Surveyor
3239

Certificate Number
Ronald J. Eidson 12641
Ronald J. Eidson 3239

LSL Rel w.o. 19 11 0753 JWSC W.O. 19 11 0842

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Submit Original
to Appropriate
District Office

OCD - HOBBS
07/27/2020
RECEIVED

GAS CAPTURE PLAN

Date: 3/2/2020

☒ Original Operator & OGRID No.: 260297
☐ Amended - Reason for Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
ROJO 7811 34-27		SEC 34 ; 25S ; 33E	2600 FSL 660 FWL	2000	Flared	Battery Connected
FED COM 21H	30-025-47461					To ETP System

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Gas Transporter and will be connected to Gas Transporter low/high pressure gathering system located in LEA County, New Mexico. It will require 0 ' of pipeline to (ETP) connect the facility to low/high pressure gathering system. Operator provides (periodically) to Gas Transporter a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Operator and Gas Transporter have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Gas Transporter Processing Plant located in Sec.____, Twn.____, Rng.____, _____ County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on Gas Transporter system at that time. Based on current information, it is Operator's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines