Santa Fe Main Office
Phone: (505) 476-3441
General Information
Phone: (505) 629-6116

Online Phone Directory Visit:
https://www.emnrd.nm.gov/ocd/contact-us/

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-015-56103

5. Indicate Type of Lease STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: Water Buffalo

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

8. Well Number 214H

2. Name of Operator: Permian Resources Operating, LLC

9. OGRID Number: 372165

3. Address of Operator: 300 N. Marienfeld St Ste 1000 Midland, Texas 79701

10. Pool name or Wildcat: Purple Sage; Wolfcamp (Gas)

4. Well Location
Unit Letter I : 1673 feet from the South line and 426 feet from the East line
Section 3 Township 22S Range 26E NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
3184ft GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☒	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER:			☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Permian Resources Operating, LLC requests permission to make the following changes to the original APD: Name Change, FTP/LTP/BHL Change, Drilling Program, Acreage Change, Defining/Infill Change

See Page 2 For Additional Details

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Stephanie Rabadue TITLE Regulatory Manager DATE 07/21/2025

Type or print name Stephanie Rabadue E-mail address: stephanie.rabadue@permianres.com PHONE: 432-260-4388

For State Use Only

APPROVED BY: TITLE DATE

Conditions of Approval (if any):

Current Well Name/Number: Water Buffalo 214H
Change Well Name/Number to: Water Buffalo State Com 214H
Formation: No Change

FTP: Revised
Change From: 990’FSL & 330’FWL, M-2-22S-26E
Change To: 990’FSL & 100’FEL, M-2-22S-26E

LTP: Revised
Change From: 990’FSL & 330’FEL, P-1-22S-26E
Change To: 330’FSL & 100’FEL, P-1-22S-26E

BHL: Revised
Change From: 990’FSL & 330’FEL, P-1-22S-26E
Change To: 330’FSL & 100’FEL, P-1-22S-26E

Acreage: Revised
From: 640
To: 1282.24

Infill/Defining Well: Revised
Change From: Defining
Change To: Infill

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☑ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name	
30-015-56103	98220	Purple Sage; Wolfcamp	
Property Code	Property Name		Well Number
~~335407~~ 337699	WATER BUFFALO STATE COM		214H
OGRID No.	Operator Name		Ground Level Elevation
372165	PERMIAN RESOURCES OPERATING, LLC		3,187'
Surface Owner: ☐ State ☒ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☒ State ☒ Fee ☐ Tribal ☐ Federal	

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
I	3	22S	26E		1,673' FSL	426' FEL	32.419198°	-104.273494°	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	1	22S	26E		990' FSL	100' FEL	32.417177°	-104.237855°	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
1282.24	Infill	30-015-56123	N	C
Order Numbers.			Well setbacks are under Common Ownership: ☒Yes ☐No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
I	3	22S	26E		1,673' FSL	426' FEL	32.419198°	-104.273494°	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	2	22S	26E		990' FSL	100' FWL	32.417347°	-104.271829°	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	1	22S	26E		990' FSL	100' FEL	32.417177°	-104.237855°	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
N/A		TBD

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Stephanie Rabadue 6/24/2025

Signature Date

Stephanie Rabadue

Printed Name

Stephanie.Rabadue@permianres.com

Email Address

SURVEYOR CERTIFICATIONS

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.

MARK MURRAY NEW MEXICO 12177 REGISTERED PROFESSIONAL SURVEYOR

Date: 6/20/2025

Signature and Seal of Professional Surveyor

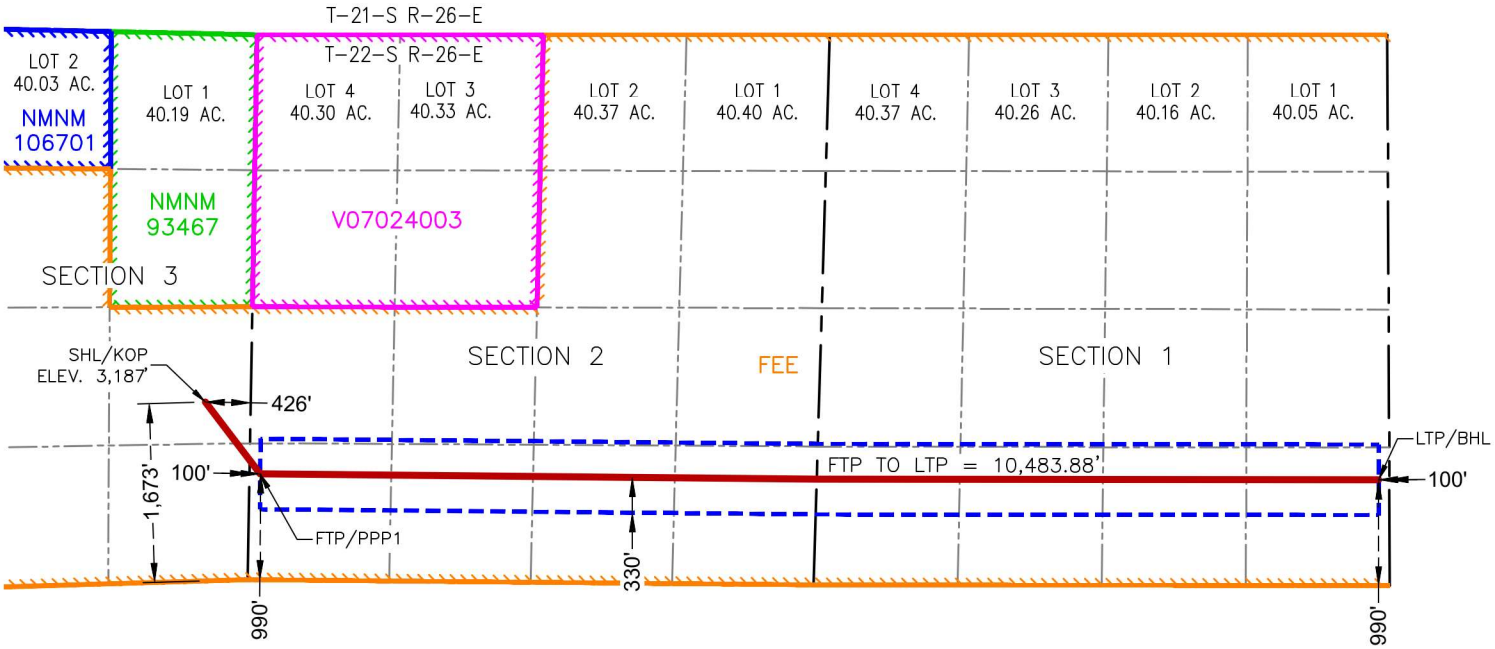
Certificate Number	Date of Survey
12177	6/20/2025

Note: 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.

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



WATER BUFFALO STATE COM 214H

SURFACE HOLE LOCATION & KICK-OFF POINT 1,673' FSL & 426' FEL ELEV. = 3,187'	FIRST TAKE POINT & PENETRATION POINT 1 990' FSL & 100' FWL	LAST TAKE POINT & BOTTOM HOLE LOCATION 990' FSL & 100' FEL
NAD 83 X = 559,802.13'	NAD 83 X = 560,316.29'	NAD 83 X = 570,799.94'
NAD 83 Y = 516,240.65'	NAD 83 Y = 515,567.67'	NAD 83 Y = 515,513.31'
NAD 83 LAT = 32.419198°	NAD 83 LAT = 32.417347°	NAD 83 LAT = 32.417177°
NAD 83 LONG = -104.273494°	NAD 83 LONG = -104.271829°	NAD 83 LONG = -104.237855°
NAD 27 X = 518,621.16'	NAD 27 X = 519,135.30'	NAD 27 X = 529,618.77'
NAD 27 Y = 516,181.02'	NAD 27 Y = 515,508.05'	NAD 27 Y = 515,453.53'
NAD 27 LAT = 32.419081°	NAD 27 LAT = 32.417230°	NAD 27 LAT = 32.417059°
NAD 27 LONG = -104.272988°	NAD 27 LONG = -104.271323°	NAD 27 LONG = -104.237350°

Permian Resources - Water Buffalo 214H

1. Geologic Formations

Formation	Elevation	TVD	Target
Rustler	3224	5	No
Top of Salt	2817	412	No
Capitan	2469	760	No
Lamar	1511	1718	No
Bell Canyon	1412	1817	No
Cherry Canyon	825	2404	No
Brushy Canyon	-159	3388	No
Bone Spring	-1710	4934	No
1st Bone Spring	-2861	6090	No
2nd Bone Spring	-3041	6270	No
3rd Bone Spring	-4899	8128	No
Wolfcamp	-5287	8516	Yes

2. Blowout Prevention

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
12.25	13-5/8"	5M	Annular	x	2500 psi
			Blind Ram	x	5000 psi
			Pipe Ram	x	
			Double Ram		
			Other*		
8.75	13-5/8"	5M	Annular	x	2500 psi
			Blind Ram	x	5000 psi
			Pipe Ram	x	
			Double Ram		
			Other*		

Equipment: BOPE will meet all requirements for above listed system per 43 CFR 3172. BOPE with working pressure ratings in excess of anticipated maximum surface pressure will be utilized for well control from drill out of surface casing to TMD. The system may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all of the components installed will be functional, tested, and will meet all requirements per 43 CFR 3172. The wellhead will be a multibowl speed head allowing for hangoff of intermediate casing of the surface x intermedicate annulus without breaking the connection between the BOP & wellhead. A variance is requested to utilize a flexible choke line (flexhose) from the BOP to choke manifold.

Requesting Variance? YES
Variance request: Multibowl Wellhead, Flexhose, Breaktesting, Offline Cementing Variances. Attachments in Section 8.
Testing Procedure: Operator requests to ONLY test broken pressure seals per API Standard 53 and the attachments in Section 8. The BOP test shall be performed before drilling out of the surface casing shoe and will occur at a minimum: a. when initially installed, b. whenever any seal subject to test pressure is broken, c. following related repairs, d. at 21-day intervals. Testing of the ram type preventer(s) and annual type preventer(s) shall be tested per 43 CFR 3172. The BOPE configuration, choke manifold layout, and accumulator system will be in compliance with 43 CFR 3172. Bleed lines will discharge 100' from wellhead in non-H2S scenarios and 150' from wellhead in H2S scenarios.

Choke Diagram Attachemnt: 5M Choke Manifold
BOP Diagram Attachment: BOP Schematic

3. Casing

String	Hole Size	Casing Size	Top	Bottom	Length	Grade	Weight	Connection	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
Surface	17.5	13.375	0	387	387	J55	54.5	BTC	5.91	31.36	Dry	7.51	Dry	7.04
Intermediate	12.25	9.625	0	1818	1818	J55	36	BTC	2.75	1.62	Dry	4.32	Dry	3.81
Production	8.75	5.5	0	8155	8155	P110RY	20	Bushmaster SP	2.37	2.47	Dry	2.36	Dry	2.36
Production	8.5	5.5	8155	18911	10756	P110RY	20	Bushmaster SP	2.37	2.47	Dry	2.36	Dry	2.36
						BLM Min Safety Factor			1.125	1		1.6		1.6

Non API casing spec sheets and casing design assumptions attached.

4. Cement

String	Lead/Tail	Top MD	Bottom MD	Quanity (sx)	Yield	Density	Cu Ft	Excess %	Cement Type	Additives
Surface	Lead	0	300	230	1.88	12.9	420	100%	Class C	EconoCem-HLC + 5% Salt + 5% Kol-Seal
Surface	Tail	300	387	80	1.34	14.8	100	50%	Class C	Accelerator
Intermediate	Lead	785	1450	180	1.88	12.9	320	50%	Class C	EconoCem-HLC + 5% Salt + 5% Kol-Seal
Intermediate	Tail	1450	1818	140	1.34	14.8	180	50%	Class C	Retarder
Stage Tool Depth		785								
Intermediate 2nd Stage	Lead	0	285	60	1.88	12.9	100	50%	Class C	EconoCem-HLC + 5% Salt + 5% Kol-Seal
Intermediate 2nd Stage	Tail	285	785	160	1.33	14.8	200	25%	Class C	Salt
Production	Lead	0	7800	1080	2.41	11.5	2590	40%	Class H	POZ, Extender, Fluid Loss, Dispersant, Retarder
Production	Tail	7800	18911	1850	1.73	12.5	3200	25%	Class H	POZ, Extender, Fluid Loss, Dispersant, Retarder

5. Circulating Medium

Mud System Type: Closed
Will an air or gas system be used: No
Describe what will be on location to control well or mitigate oter conditions: Sufficient quantities of mud materials will be on the well site at all times for the purpose of assuring well control and maintaining wellbore integrity. Surface interval will employ fresh water mud. The intermediate hole will utilize a saturated brine fluid to inhibit salt washout. The production hole will employ brine based and oil base fluid to inhibit formation reactivity and of the appropriate density to maintain well control.

Describe the mud monitoring system utilized: Centrifuge separation system. Open tank monitoring with EDR will be used for drilling fluids and return volumes. Open tank monitoring will be used for cement and cuttings return volumes. Mud properties will be monitored at least every 24 hours using industry accepted mud check practices.

Cuttings Volume: 8710 Cu Ft

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight	Max Weight
0	387	Spud Mud	8.6	9.5
387	1818	Fresh Water	8.6	10
1818	8155	OBM	9	10.5
8155	18911	OBM	9	10.5

6. Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:
Will utilize MWD/LWD from intermediate hole to TD of the well.
List of open and cased hole logs run in the well:
DIRECTIONAL SURVEY
Coring operation description for the well:
N/A

7. Pressure

Anticipated Bottom Hole Pressure	4690	psi
Anticipated Surface Pressure	2797	psi
Anticipated Bottom Hole Temperature	143	°F
Anticipated Abnormal pressure, temp, or geo hazards	No	

PERMIAN RESOURCES

NEW MEXICO

(SP) EDDY
WATER BUFFALO
WATER BUFFALO STATE COM 214H

OWB

Plan: PWP0

Standard Planning Report - Geographic

24 June, 2025

PERMIAN RESOURCES

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference:**	Well WATER BUFFALO STATE COM 214H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3217.0usft
Project:	(SP) EDDY	**MD Reference:**	KB @ 3217.0usft
Site:	WATER BUFFALO	**North Reference:**	Grid
Well:	WATER BUFFALO STATE COM 214H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Project (SP) EDDY

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site WATER BUFFALO

Site Position:		**Northing:**	516,263.18 usft	**Latitude:**	32° 25' 9.336 N
From:	Map	**Easting:**	559,833.96 usft	**Longitude:**	104° 16' 24.206 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well WATER BUFFALO STATE COM 214H

Well Position	**+N/-S**	0.0 usft	**Northing:**	516,240.65 usft	**Latitude:**	32° 25' 9.113 N
	+E/-W	0.0 usft	**Easting:**	559,802.13 usft	**Longitude:**	104° 16' 24.578 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,187.0 usft
Grid Convergence:		0.03 °				

Wellbore OWB

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	8.08	60.30	48,833.28032102

Design PWP0

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	93.78

Plan Survey Tool Program **Date** 6/24/2025

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	18,911.3	PWP0 (OWB)	MWD OWSG_Rev2_ MWD - Standa	

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	
1,360.8	7.22	142.62	1,359.9	-18.0	13.8	2.00	2.00	0.00	142.62	
7,741.6	7.22	142.62	7,690.1	-654.9	500.4	0.00	0.00	0.00	0.00	
8,102.4	0.00	0.00	8,050.0	-673.0	514.2	2.00	-2.00	0.00	180.00	
8,154.9	0.00	0.00	8,102.5	-673.0	514.2	0.00	0.00	0.00	0.00	
8,904.9	90.00	90.30	8,580.0	-675.5	991.6	12.00	12.00	12.04	90.30	
18,911.3	90.00	90.30	8,580.0	-727.3	10,997.8	0.00	0.00	0.00	0.00	LTP/BHL WB 214H

PERMIAN RESOURCES

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference:**	Well WATER BUFFALO STATE COM 214H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3217.0usft
Project:	(SP) EDDY	**MD Reference:**	KB @ 3217.0usft
Site:	WATER BUFFALO	**North Reference:**	Grid
Well:	WATER BUFFALO STATE COM 214H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

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	516,240.65	559,802.13	32° 25' 9.113 N	104° 16' 24.578 W
100.0	0.00	0.00	100.0	0.0	0.0	516,240.65	559,802.13	32° 25' 9.113 N	104° 16' 24.578 W
200.0	0.00	0.00	200.0	0.0	0.0	516,240.65	559,802.13	32° 25' 9.113 N	104° 16' 24.578 W
300.0	0.00	0.00	300.0	0.0	0.0	516,240.65	559,802.13	32° 25' 9.113 N	104° 16' 24.578 W
400.0	0.00	0.00	400.0	0.0	0.0	516,240.65	559,802.13	32° 25' 9.113 N	104° 16' 24.578 W
500.0	0.00	0.00	500.0	0.0	0.0	516,240.65	559,802.13	32° 25' 9.113 N	104° 16' 24.578 W
600.0	0.00	0.00	600.0	0.0	0.0	516,240.65	559,802.13	32° 25' 9.113 N	104° 16' 24.578 W
700.0	0.00	0.00	700.0	0.0	0.0	516,240.65	559,802.13	32° 25' 9.113 N	104° 16' 24.578 W
800.0	0.00	0.00	800.0	0.0	0.0	516,240.65	559,802.13	32° 25' 9.113 N	104° 16' 24.578 W
900.0	0.00	0.00	900.0	0.0	0.0	516,240.65	559,802.13	32° 25' 9.113 N	104° 16' 24.578 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	516,240.65	559,802.13	32° 25' 9.113 N	104° 16' 24.578 W
Start Build 2.00									
1,100.0	2.00	142.62	1,100.0	-1.4	1.1	516,239.26	559,803.19	32° 25' 9.100 N	104° 16' 24.566 W
1,200.0	4.00	142.62	1,199.8	-5.5	4.2	516,235.11	559,806.37	32° 25' 9.058 N	104° 16' 24.529 W
1,300.0	6.00	142.62	1,299.5	-12.5	9.5	516,228.18	559,811.66	32° 25' 8.990 N	104° 16' 24.467 W
1,360.8	7.22	142.62	1,359.9	-18.0	13.8	516,222.62	559,815.91	32° 25' 8.935 N	104° 16' 24.417 W
Start 6380.8 hold at 1360.8 MD									
1,400.0	7.22	142.62	1,398.7	-21.9	16.8	516,218.71	559,818.90	32° 25' 8.896 N	104° 16' 24.382 W
1,500.0	7.22	142.62	1,497.9	-31.9	24.4	516,208.73	559,826.52	32° 25' 8.797 N	104° 16' 24.294 W
1,600.0	7.22	142.62	1,597.2	-41.9	32.0	516,198.75	559,834.15	32° 25' 8.698 N	104° 16' 24.205 W
1,700.0	7.22	142.62	1,696.4	-51.9	39.6	516,188.76	559,841.78	32° 25' 8.600 N	104° 16' 24.116 W
1,800.0	7.22	142.62	1,795.6	-61.9	47.3	516,178.78	559,849.40	32° 25' 8.501 N	104° 16' 24.027 W
1,900.0	7.22	142.62	1,894.8	-71.9	54.9	516,168.80	559,857.03	32° 25' 8.402 N	104° 16' 23.938 W
2,000.0	7.22	142.62	1,994.0	-81.8	62.5	516,158.82	559,864.65	32° 25' 8.303 N	104° 16' 23.849 W
2,100.0	7.22	142.62	2,093.2	-91.8	70.1	516,148.84	559,872.28	32° 25' 8.204 N	104° 16' 23.760 W
2,200.0	7.22	142.62	2,192.4	-101.8	77.8	516,138.85	559,879.91	32° 25' 8.105 N	104° 16' 23.671 W
2,300.0	7.22	142.62	2,291.6	-111.8	85.4	516,128.87	559,887.53	32° 25' 8.007 N	104° 16' 23.582 W
2,400.0	7.22	142.62	2,390.8	-121.8	93.0	516,118.89	559,895.16	32° 25' 7.908 N	104° 16' 23.493 W
2,500.0	7.22	142.62	2,490.0	-131.7	100.7	516,108.91	559,902.78	32° 25' 7.809 N	104° 16' 23.405 W
2,600.0	7.22	142.62	2,589.2	-141.7	108.3	516,098.93	559,910.41	32° 25' 7.710 N	104° 16' 23.316 W
2,700.0	7.22	142.62	2,688.4	-151.7	115.9	516,088.95	559,918.04	32° 25' 7.611 N	104° 16' 23.227 W
2,800.0	7.22	142.62	2,787.6	-161.7	123.5	516,078.96	559,925.66	32° 25' 7.513 N	104° 16' 23.138 W
2,900.0	7.22	142.62	2,886.9	-171.7	131.2	516,068.98	559,933.29	32° 25' 7.414 N	104° 16' 23.049 W
3,000.0	7.22	142.62	2,986.1	-181.7	138.8	516,059.00	559,940.91	32° 25' 7.315 N	104° 16' 22.960 W
3,100.0	7.22	142.62	3,085.3	-191.6	146.4	516,049.02	559,948.54	32° 25' 7.216 N	104° 16' 22.871 W
3,200.0	7.22	142.62	3,184.5	-201.6	154.0	516,039.04	559,956.17	32° 25' 7.117 N	104° 16' 22.782 W
3,300.0	7.22	142.62	3,283.7	-211.6	161.7	516,029.06	559,963.79	32° 25' 7.018 N	104° 16' 22.693 W
3,400.0	7.22	142.62	3,382.9	-221.6	169.3	516,019.07	559,971.42	32° 25' 6.920 N	104° 16' 22.604 W
3,500.0	7.22	142.62	3,482.1	-231.6	176.9	516,009.09	559,979.05	32° 25' 6.821 N	104° 16' 22.515 W
3,600.0	7.22	142.62	3,581.3	-241.5	184.5	515,999.11	559,986.67	32° 25' 6.722 N	104° 16' 22.427 W
3,700.0	7.22	142.62	3,680.5	-251.5	192.2	515,989.13	559,994.30	32° 25' 6.623 N	104° 16' 22.338 W
3,800.0	7.22	142.62	3,779.7	-261.5	199.8	515,979.15	560,001.92	32° 25' 6.524 N	104° 16' 22.249 W
3,900.0	7.22	142.62	3,878.9	-271.5	207.4	515,969.17	560,009.55	32° 25' 6.426 N	104° 16' 22.160 W
4,000.0	7.22	142.62	3,978.1	-281.5	215.0	515,959.18	560,017.18	32° 25' 6.327 N	104° 16' 22.071 W
4,100.0	7.22	142.62	4,077.3	-291.4	222.7	515,949.20	560,024.80	32° 25' 6.228 N	104° 16' 21.982 W
4,200.0	7.22	142.62	4,176.6	-301.4	230.3	515,939.22	560,032.43	32° 25' 6.129 N	104° 16' 21.893 W
4,300.0	7.22	142.62	4,275.8	-311.4	237.9	515,929.24	560,040.05	32° 25' 6.030 N	104° 16' 21.804 W
4,400.0	7.22	142.62	4,375.0	-321.4	245.5	515,919.26	560,047.68	32° 25' 5.931 N	104° 16' 21.715 W
4,500.0	7.22	142.62	4,474.2	-331.4	253.2	515,909.27	560,055.31	32° 25' 5.833 N	104° 16' 21.626 W
4,600.0	7.22	142.62	4,573.4	-341.4	260.8	515,899.29	560,062.93	32° 25' 5.734 N	104° 16' 21.538 W
4,700.0	7.22	142.62	4,672.6	-351.3	268.4	515,889.31	560,070.56	32° 25' 5.635 N	104° 16' 21.449 W
4,800.0	7.22	142.62	4,771.8	-361.3	276.1	515,879.33	560,078.18	32° 25' 5.536 N	104° 16' 21.360 W
4,900.0	7.22	142.62	4,871.0	-371.3	283.7	515,869.35	560,085.81	32° 25' 5.437 N	104° 16' 21.271 W
5,000.0	7.22	142.62	4,970.2	-381.3	291.3	515,859.37	560,093.44	32° 25' 5.339 N	104° 16' 21.182 W

PERMIAN RESOURCES

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference:**	Well WATER BUFFALO STATE COM 214H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3217.0usft
Project:	(SP) EDDY	**MD Reference:**	KB @ 3217.0usft
Site:	WATER BUFFALO	**North Reference:**	Grid
Well:	WATER BUFFALO STATE COM 214H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,100.0	7.22	142.62	5,069.4	-391.3	298.9	515,849.38	560,101.06	32° 25' 5.240 N	104° 16' 21.093 W
5,200.0	7.22	142.62	5,168.6	-401.2	306.6	515,839.40	560,108.69	32° 25' 5.141 N	104° 16' 21.004 W
5,300.0	7.22	142.62	5,267.8	-411.2	314.2	515,829.42	560,116.31	32° 25' 5.042 N	104° 16' 20.915 W
5,400.0	7.22	142.62	5,367.1	-421.2	321.8	515,819.44	560,123.94	32° 25' 4.943 N	104° 16' 20.826 W
5,500.0	7.22	142.62	5,466.3	-431.2	329.4	515,809.46	560,131.57	32° 25' 4.844 N	104° 16' 20.737 W
5,600.0	7.22	142.62	5,565.5	-441.2	337.1	515,799.48	560,139.19	32° 25' 4.746 N	104° 16' 20.648 W
5,700.0	7.22	142.62	5,664.7	-451.2	344.7	515,789.49	560,146.82	32° 25' 4.647 N	104° 16' 20.560 W
5,800.0	7.22	142.62	5,763.9	-461.1	352.3	515,779.51	560,154.45	32° 25' 4.548 N	104° 16' 20.471 W
5,900.0	7.22	142.62	5,863.1	-471.1	359.9	515,769.53	560,162.07	32° 25' 4.449 N	104° 16' 20.382 W
6,000.0	7.22	142.62	5,962.3	-481.1	367.6	515,759.55	560,169.70	32° 25' 4.350 N	104° 16' 20.293 W
6,100.0	7.22	142.62	6,061.5	-491.1	375.2	515,749.57	560,177.32	32° 25' 4.252 N	104° 16' 20.204 W
6,200.0	7.22	142.62	6,160.7	-501.1	382.8	515,739.59	560,184.95	32° 25' 4.153 N	104° 16' 20.115 W
6,300.0	7.22	142.62	6,259.9	-511.0	390.4	515,729.60	560,192.58	32° 25' 4.054 N	104° 16' 20.026 W
6,400.0	7.22	142.62	6,359.1	-521.0	398.1	515,719.62	560,200.20	32° 25' 3.955 N	104° 16' 19.937 W
6,500.0	7.22	142.62	6,458.3	-531.0	405.7	515,709.64	560,207.83	32° 25' 3.856 N	104° 16' 19.848 W
6,600.0	7.22	142.62	6,557.5	-541.0	413.3	515,699.66	560,215.45	32° 25' 3.757 N	104° 16' 19.759 W
6,700.0	7.22	142.62	6,656.8	-551.0	420.9	515,689.68	560,223.08	32° 25' 3.659 N	104° 16' 19.671 W
6,800.0	7.22	142.62	6,756.0	-561.0	428.6	515,679.69	560,230.71	32° 25' 3.560 N	104° 16' 19.582 W
6,900.0	7.22	142.62	6,855.2	-570.9	436.2	515,669.71	560,238.33	32° 25' 3.461 N	104° 16' 19.493 W
7,000.0	7.22	142.62	6,954.4	-580.9	443.8	515,659.73	560,245.96	32° 25' 3.362 N	104° 16' 19.404 W
7,100.0	7.22	142.62	7,053.6	-590.9	451.5	515,649.75	560,253.58	32° 25' 3.263 N	104° 16' 19.315 W
7,200.0	7.22	142.62	7,152.8	-600.9	459.1	515,639.77	560,261.21	32° 25' 3.164 N	104° 16' 19.226 W
7,300.0	7.22	142.62	7,252.0	-610.9	466.7	515,629.79	560,268.84	32° 25' 3.066 N	104° 16' 19.137 W
7,400.0	7.22	142.62	7,351.2	-620.8	474.3	515,619.80	560,276.46	32° 25' 2.967 N	104° 16' 19.048 W
7,500.0	7.22	142.62	7,450.4	-630.8	482.0	515,609.82	560,284.09	32° 25' 2.868 N	104° 16' 18.959 W
7,600.0	7.22	142.62	7,549.6	-640.8	489.6	515,599.84	560,291.72	32° 25' 2.769 N	104° 16' 18.870 W
7,700.0	7.22	142.62	7,648.8	-650.8	497.2	515,589.86	560,299.34	32° 25' 2.670 N	104° 16' 18.781 W
7,741.6	7.22	142.62	7,690.1	-654.9	500.4	515,585.70	560,302.52	32° 25' 2.629 N	104° 16' 18.744 W
Start Drop -2.00									
7,800.0	6.05	142.62	7,748.1	-660.3	504.5	515,580.35	560,306.61	32° 25' 2.576 N	104° 16' 18.697 W
7,900.0	4.05	142.62	7,847.7	-667.3	509.8	515,573.35	560,311.95	32° 25' 2.507 N	104° 16' 18.634 W
8,000.0	2.05	142.62	7,947.6	-671.5	513.0	515,569.13	560,315.18	32° 25' 2.465 N	104° 16' 18.597 W
8,102.4	0.00	0.00	8,050.0	-673.0	514.2	515,567.67	560,316.29	32° 25' 2.451 N	104° 16' 18.584 W
Start 52.5 hold at 8102.4 MD									
8,154.9	0.00	0.00	8,102.5	-673.0	514.2	515,567.67	560,316.29	32° 25' 2.451 N	104° 16' 18.584 W
Start DLS 12.00 TFO 90.30									
8,175.0	2.41	90.30	8,122.5	-673.0	514.6	515,567.67	560,316.71	32° 25' 2.451 N	104° 16' 18.579 W
8,200.0	5.41	90.30	8,147.5	-673.0	516.3	515,567.66	560,318.42	32° 25' 2.451 N	104° 16' 18.559 W
8,225.0	8.41	90.30	8,172.3	-673.0	519.3	515,567.64	560,321.42	32° 25' 2.450 N	104° 16' 18.524 W
8,250.0	11.41	90.30	8,196.9	-673.0	523.6	515,567.62	560,325.72	32° 25' 2.450 N	104° 16' 18.474 W
8,275.0	14.41	90.30	8,221.3	-673.1	529.2	515,567.59	560,331.31	32° 25' 2.450 N	104° 16' 18.409 W
8,300.0	17.41	90.30	8,245.3	-673.1	536.0	515,567.56	560,338.16	32° 25' 2.449 N	104° 16' 18.329 W
8,325.0	20.41	90.30	8,269.0	-673.1	544.1	515,567.52	560,346.26	32° 25' 2.449 N	104° 16' 18.234 W
8,350.0	23.41	90.30	8,292.2	-673.2	553.4	515,567.47	560,355.58	32° 25' 2.448 N	104° 16' 18.126 W
8,375.0	26.41	90.30	8,314.8	-673.2	564.0	515,567.41	560,366.11	32° 25' 2.448 N	104° 16' 18.003 W
8,400.0	29.41	90.30	8,336.9	-673.3	575.7	515,567.35	560,377.81	32° 25' 2.447 N	104° 16' 17.866 W
8,425.0	32.41	90.30	8,358.4	-673.4	588.5	515,567.29	560,390.65	32° 25' 2.446 N	104° 16' 17.716 W
8,450.0	35.41	90.30	8,379.1	-673.4	602.5	515,567.21	560,404.59	32° 25' 2.446 N	104° 16' 17.554 W
8,475.0	38.41	90.30	8,399.1	-673.5	617.5	515,567.14	560,419.60	32° 25' 2.445 N	104° 16' 17.379 W
8,500.0	41.41	90.30	8,418.3	-673.6	633.5	515,567.05	560,435.64	32° 25' 2.444 N	104° 16' 17.192 W
8,525.0	44.41	90.30	8,436.6	-673.7	650.5	515,566.96	560,452.66	32° 25' 2.443 N	104° 16' 16.993 W
8,526.8	44.63	90.30	8,437.9	-673.7	651.8	515,566.96	560,453.95	32° 25' 2.443 N	104° 16' 16.978 W
FTP WB 214H									
8,550.0	47.41	90.30	8,454.0	-673.8	668.5	515,566.87	560,470.61	32° 25' 2.442 N	104° 16' 16.784 W

PERMIAN RESOURCES

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference:**	Well WATER BUFFALO STATE COM 214H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3217.0usft
Project:	(SP) EDDY	**MD Reference:**	KB @ 3217.0usft
Site:	WATER BUFFALO	**North Reference:**	Grid
Well:	WATER BUFFALO STATE COM 214H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,575.0	50.41	90.30	8,470.4	-673.9	687.3	515,566.77	560,489.45	32° 25' 2.441 N	104° 16' 16.564 W
8,600.0	53.41	90.30	8,485.8	-674.0	707.0	515,566.67	560,509.12	32° 25' 2.440 N	104° 16' 16.334 W
8,625.0	56.41	90.30	8,500.2	-674.1	727.4	515,566.57	560,529.57	32° 25' 2.439 N	104° 16' 16.096 W
8,650.0	59.41	90.30	8,513.5	-674.2	748.6	515,566.46	560,550.75	32° 25' 2.437 N	104° 16' 15.849 W
8,675.0	62.41	90.30	8,525.7	-674.3	770.5	515,566.34	560,572.59	32° 25' 2.436 N	104° 16' 15.594 W
8,700.0	65.41	90.30	8,536.6	-674.4	792.9	515,566.23	560,595.04	32° 25' 2.435 N	104° 16' 15.332 W
8,725.0	68.41	90.30	8,546.5	-674.5	815.9	515,566.11	560,618.03	32° 25' 2.434 N	104° 16' 15.064 W
8,750.0	71.41	90.30	8,555.0	-674.7	839.4	515,565.99	560,641.51	32° 25' 2.432 N	104° 16' 14.790 W
8,775.0	74.41	90.30	8,562.4	-674.8	863.3	515,565.86	560,665.40	32° 25' 2.431 N	104° 16' 14.511 W
8,800.0	77.41	90.30	8,568.5	-674.9	887.5	515,565.74	560,689.65	32° 25' 2.429 N	104° 16' 14.228 W
8,825.0	80.41	90.30	8,573.3	-675.0	912.0	515,565.61	560,714.18	32° 25' 2.428 N	104° 16' 13.942 W
8,850.0	83.41	90.30	8,576.8	-675.2	936.8	515,565.48	560,738.92	32° 25' 2.427 N	104° 16' 13.653 W
8,875.0	86.41	90.30	8,579.0	-675.3	961.7	515,565.35	560,763.82	32° 25' 2.425 N	104° 16' 13.363 W
8,900.0	89.41	90.30	8,579.9	-675.4	986.7	515,565.22	560,788.80	32° 25' 2.424 N	104° 16' 13.071 W
8,904.9	90.00	90.30	8,580.0	-675.5	991.6	515,565.20	560,793.75	32° 25' 2.423 N	104° 16' 13.014 W
Start 10006.3 hold at 8904.9 MD									
9,000.0	90.00	90.30	8,580.0	-675.9	1,086.7	515,564.70	560,888.80	32° 25' 2.418 N	104° 16' 11.905 W
9,100.0	90.00	90.30	8,580.0	-676.5	1,186.7	515,564.18	560,988.80	32° 25' 2.412 N	104° 16' 10.738 W
9,200.0	90.00	90.30	8,580.0	-677.0	1,286.7	515,563.67	561,088.80	32° 25' 2.407 N	104° 16' 9.571 W
9,300.0	90.00	90.30	8,580.0	-677.5	1,386.7	515,563.15	561,188.80	32° 25' 2.401 N	104° 16' 8.405 W
9,400.0	90.00	90.30	8,580.0	-678.0	1,486.7	515,562.63	561,288.80	32° 25' 2.395 N	104° 16' 7.238 W
9,500.0	90.00	90.30	8,580.0	-678.5	1,586.7	515,562.11	561,388.79	32° 25' 2.389 N	104° 16' 6.072 W
9,600.0	90.00	90.30	8,580.0	-679.1	1,686.7	515,561.59	561,488.79	32° 25' 2.384 N	104° 16' 4.905 W
9,700.0	90.00	90.30	8,580.0	-679.6	1,786.7	515,561.07	561,588.79	32° 25' 2.378 N	104° 16' 3.738 W
9,800.0	90.00	90.30	8,580.0	-680.1	1,886.7	515,560.55	561,688.79	32° 25' 2.372 N	104° 16' 2.572 W
9,900.0	90.00	90.30	8,580.0	-680.6	1,986.7	515,560.04	561,788.79	32° 25' 2.366 N	104° 16' 1.405 W
10,000.0	90.00	90.30	8,580.0	-681.1	2,086.7	515,559.52	561,888.79	32° 25' 2.361 N	104° 16' 0.238 W
10,100.0	90.00	90.30	8,580.0	-681.7	2,186.7	515,559.00	561,988.79	32° 25' 2.355 N	104° 15' 59.072 W
10,200.0	90.00	90.30	8,580.0	-682.2	2,286.7	515,558.48	562,088.78	32° 25' 2.349 N	104° 15' 57.905 W
10,300.0	90.00	90.30	8,580.0	-682.7	2,386.7	515,557.96	562,188.78	32° 25' 2.343 N	104° 15' 56.739 W
10,400.0	90.00	90.30	8,580.0	-683.2	2,486.6	515,557.44	562,288.78	32° 25' 2.338 N	104° 15' 55.572 W
10,500.0	90.00	90.30	8,580.0	-683.7	2,586.6	515,556.93	562,388.78	32° 25' 2.332 N	104° 15' 54.405 W
10,600.0	90.00	90.30	8,580.0	-684.2	2,686.6	515,556.41	562,488.78	32° 25' 2.326 N	104° 15' 53.239 W
10,700.0	90.00	90.30	8,580.0	-684.8	2,786.6	515,555.89	562,588.78	32° 25' 2.320 N	104° 15' 52.072 W
10,800.0	90.00	90.30	8,580.0	-685.3	2,886.6	515,555.37	562,688.78	32° 25' 2.315 N	104° 15' 50.905 W
10,900.0	90.00	90.30	8,580.0	-685.8	2,986.6	515,554.85	562,788.78	32° 25' 2.309 N	104° 15' 49.739 W
11,000.0	90.00	90.30	8,580.0	-686.3	3,086.6	515,554.33	562,888.77	32° 25' 2.303 N	104° 15' 48.572 W
11,100.0	90.00	90.30	8,580.0	-686.8	3,186.6	515,553.81	562,988.77	32° 25' 2.297 N	104° 15' 47.405 W
11,200.0	90.00	90.30	8,580.0	-687.4	3,286.6	515,553.30	563,088.77	32° 25' 2.292 N	104° 15' 46.239 W
11,300.0	90.00	90.30	8,580.0	-687.9	3,386.6	515,552.78	563,188.77	32° 25' 2.286 N	104° 15' 45.072 W
11,400.0	90.00	90.30	8,580.0	-688.4	3,486.6	515,552.26	563,288.77	32° 25' 2.280 N	104° 15' 43.906 W
11,500.0	90.00	90.30	8,580.0	-688.9	3,586.6	515,551.74	563,388.77	32° 25' 2.274 N	104° 15' 42.739 W
11,600.0	90.00	90.30	8,580.0	-689.4	3,686.6	515,551.22	563,488.77	32° 25' 2.268 N	104° 15' 41.572 W
11,700.0	90.00	90.30	8,580.0	-689.9	3,786.6	515,550.70	563,588.76	32° 25' 2.263 N	104° 15' 40.406 W
11,800.0	90.00	90.30	8,580.0	-690.5	3,886.6	515,550.18	563,688.76	32° 25' 2.257 N	104° 15' 39.239 W
11,900.0	90.00	90.30	8,580.0	-691.0	3,986.6	515,549.67	563,788.76	32° 25' 2.251 N	104° 15' 38.072 W
12,000.0	90.00	90.30	8,580.0	-691.5	4,086.6	515,549.15	563,888.76	32° 25' 2.245 N	104° 15' 36.906 W
12,100.0	90.00	90.30	8,580.0	-692.0	4,186.6	515,548.63	563,988.76	32° 25' 2.239 N	104° 15' 35.739 W
12,200.0	90.00	90.30	8,580.0	-692.5	4,286.6	515,548.11	564,088.76	32° 25' 2.234 N	104° 15' 34.573 W
12,300.0	90.00	90.30	8,580.0	-693.1	4,386.6	515,547.59	564,188.76	32° 25' 2.228 N	104° 15' 33.406 W
12,400.0	90.00	90.30	8,580.0	-693.6	4,486.6	515,547.07	564,288.76	32° 25' 2.222 N	104° 15' 32.239 W
12,500.0	90.00	90.30	8,580.0	-694.1	4,586.6	515,546.55	564,388.75	32° 25' 2.216 N	104° 15' 31.073 W
12,600.0	90.00	90.30	8,580.0	-694.6	4,686.6	515,546.04	564,488.75	32° 25' 2.210 N	104° 15' 29.906 W
12,700.0	90.00	90.30	8,580.0	-695.1	4,786.6	515,545.52	564,588.75	32° 25' 2.204 N	104° 15' 28.739 W

PERMIAN RESOURCES

Planning Report - Geographic

Database:	Compass_17	**Local Co-ordinate Reference:**	Well WATER BUFFALO STATE COM 214H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3217.0usft
Project:	(SP) EDDY	**MD Reference:**	KB @ 3217.0usft
Site:	WATER BUFFALO	**North Reference:**	Grid
Well:	WATER BUFFALO STATE COM 214H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
12,800.0	90.00	90.30	8,580.0	-695.7	4,886.6	515,545.00	564,688.75	32° 25' 2.199 N	104° 15' 27.573 W
12,900.0	90.00	90.30	8,580.0	-696.2	4,986.6	515,544.48	564,788.75	32° 25' 2.193 N	104° 15' 26.406 W
13,000.0	90.00	90.30	8,580.0	-696.7	5,086.6	515,543.96	564,888.75	32° 25' 2.187 N	104° 15' 25.240 W
13,100.0	90.00	90.30	8,580.0	-697.2	5,186.6	515,543.44	564,988.75	32° 25' 2.181 N	104° 15' 24.073 W
13,200.0	90.00	90.30	8,580.0	-697.7	5,286.6	515,542.93	565,088.74	32° 25' 2.175 N	104° 15' 22.906 W
13,300.0	90.00	90.30	8,580.0	-698.2	5,386.6	515,542.41	565,188.74	32° 25' 2.169 N	104° 15' 21.740 W
13,400.0	90.00	90.30	8,580.0	-698.8	5,486.6	515,541.89	565,288.74	32° 25' 2.164 N	104° 15' 20.573 W
13,500.0	90.00	90.30	8,580.0	-699.3	5,586.6	515,541.37	565,388.74	32° 25' 2.158 N	104° 15' 19.406 W
13,600.0	90.00	90.30	8,580.0	-699.8	5,686.6	515,540.85	565,488.74	32° 25' 2.152 N	104° 15' 18.240 W
13,700.0	90.00	90.30	8,580.0	-700.3	5,786.6	515,540.33	565,588.74	32° 25' 2.146 N	104° 15' 17.073 W
13,800.0	90.00	90.30	8,580.0	-700.8	5,886.6	515,539.81	565,688.74	32° 25' 2.140 N	104° 15' 15.907 W
13,900.0	90.00	90.30	8,580.0	-701.4	5,986.6	515,539.30	565,788.74	32° 25' 2.134 N	104° 15' 14.740 W
14,000.0	90.00	90.30	8,580.0	-701.9	6,086.6	515,538.78	565,888.73	32° 25' 2.128 N	104° 15' 13.573 W
14,100.0	90.00	90.30	8,580.0	-702.4	6,186.6	515,538.26	565,988.73	32° 25' 2.123 N	104° 15' 12.407 W
14,200.0	90.00	90.30	8,580.0	-702.9	6,286.6	515,537.74	566,088.73	32° 25' 2.117 N	104° 15' 11.240 W
14,300.0	90.00	90.30	8,580.0	-703.4	6,386.6	515,537.22	566,188.73	32° 25' 2.111 N	104° 15' 10.073 W
14,400.0	90.00	90.30	8,580.0	-703.9	6,486.6	515,536.70	566,288.73	32° 25' 2.105 N	104° 15' 8.907 W
14,500.0	90.00	90.30	8,580.0	-704.5	6,586.6	515,536.18	566,388.73	32° 25' 2.099 N	104° 15' 7.740 W
14,600.0	90.00	90.30	8,580.0	-705.0	6,686.6	515,535.67	566,488.73	32° 25' 2.093 N	104° 15' 6.574 W
14,700.0	90.00	90.30	8,580.0	-705.5	6,786.6	515,535.15	566,588.72	32° 25' 2.087 N	104° 15' 5.407 W
14,800.0	90.00	90.30	8,580.0	-706.0	6,886.6	515,534.63	566,688.72	32° 25' 2.081 N	104° 15' 4.240 W
14,900.0	90.00	90.30	8,580.0	-706.5	6,986.6	515,534.11	566,788.72	32° 25' 2.075 N	104° 15' 3.074 W
15,000.0	90.00	90.30	8,580.0	-707.1	7,086.6	515,533.59	566,888.72	32° 25' 2.070 N	104° 15' 1.907 W
15,100.0	90.00	90.30	8,580.0	-707.6	7,186.6	515,533.07	566,988.72	32° 25' 2.064 N	104° 15' 0.740 W
15,200.0	90.00	90.30	8,580.0	-708.1	7,286.6	515,532.56	567,088.72	32° 25' 2.058 N	104° 14' 59.574 W
15,300.0	90.00	90.30	8,580.0	-708.6	7,386.6	515,532.04	567,188.72	32° 25' 2.052 N	104° 14' 58.407 W
15,400.0	90.00	90.30	8,580.0	-709.1	7,486.6	515,531.52	567,288.71	32° 25' 2.046 N	104° 14' 57.240 W
15,500.0	90.00	90.30	8,580.0	-709.7	7,586.6	515,531.00	567,388.71	32° 25' 2.040 N	104° 14' 56.074 W
15,600.0	90.00	90.30	8,580.0	-710.2	7,686.6	515,530.48	567,488.71	32° 25' 2.034 N	104° 14' 54.907 W
15,700.0	90.00	90.30	8,580.0	-710.7	7,786.6	515,529.96	567,588.71	32° 25' 2.028 N	104° 14' 53.741 W
15,800.0	90.00	90.30	8,580.0	-711.2	7,886.6	515,529.44	567,688.71	32° 25' 2.022 N	104° 14' 52.574 W
15,900.0	90.00	90.30	8,580.0	-711.7	7,986.6	515,528.93	567,788.71	32° 25' 2.016 N	104° 14' 51.407 W
16,000.0	90.00	90.30	8,580.0	-712.2	8,086.6	515,528.41	567,888.71	32° 25' 2.010 N	104° 14' 50.241 W
16,100.0	90.00	90.30	8,580.0	-712.8	8,186.6	515,527.89	567,988.71	32° 25' 2.005 N	104° 14' 49.074 W
16,200.0	90.00	90.30	8,580.0	-713.3	8,286.6	515,527.37	568,088.70	32° 25' 1.999 N	104° 14' 47.907 W
16,300.0	90.00	90.30	8,580.0	-713.8	8,386.6	515,526.85	568,188.70	32° 25' 1.993 N	104° 14' 46.741 W
16,400.0	90.00	90.30	8,580.0	-714.3	8,486.6	515,526.33	568,288.70	32° 25' 1.987 N	104° 14' 45.574 W
16,500.0	90.00	90.30	8,580.0	-714.8	8,586.6	515,525.81	568,388.70	32° 25' 1.981 N	104° 14' 44.408 W
16,600.0	90.00	90.30	8,580.0	-715.4	8,686.6	515,525.30	568,488.70	32° 25' 1.975 N	104° 14' 43.241 W
16,700.0	90.00	90.30	8,580.0	-715.9	8,786.6	515,524.78	568,588.70	32° 25' 1.969 N	104° 14' 42.074 W
16,800.0	90.00	90.30	8,580.0	-716.4	8,886.6	515,524.26	568,688.70	32° 25' 1.963 N	104° 14' 40.908 W
16,900.0	90.00	90.30	8,580.0	-716.9	8,986.6	515,523.74	568,788.69	32° 25' 1.957 N	104° 14' 39.741 W
17,000.0	90.00	90.30	8,580.0	-717.4	9,086.6	515,523.22	568,888.69	32° 25' 1.951 N	104° 14' 38.574 W
17,100.0	90.00	90.30	8,580.0	-717.9	9,186.6	515,522.70	568,988.69	32° 25' 1.945 N	104° 14' 37.408 W
17,200.0	90.00	90.30	8,580.0	-718.5	9,286.6	515,522.18	569,088.69	32° 25' 1.939 N	104° 14' 36.241 W
17,300.0	90.00	90.30	8,580.0	-719.0	9,386.6	515,521.67	569,188.69	32° 25' 1.933 N	104° 14' 35.075 W
17,400.0	90.00	90.30	8,580.0	-719.5	9,486.6	515,521.15	569,288.69	32° 25' 1.927 N	104° 14' 33.908 W
17,500.0	90.00	90.30	8,580.0	-720.0	9,586.6	515,520.63	569,388.69	32° 25' 1.921 N	104° 14' 32.741 W
17,600.0	90.00	90.30	8,580.0	-720.5	9,686.6	515,520.11	569,488.69	32° 25' 1.915 N	104° 14' 31.575 W
17,700.0	90.00	90.30	8,580.0	-721.1	9,786.6	515,519.59	569,588.68	32° 25' 1.909 N	104° 14' 30.408 W
17,800.0	90.00	90.30	8,580.0	-721.6	9,886.5	515,519.07	569,688.68	32° 25' 1.903 N	104° 14' 29.241 W
17,900.0	90.00	90.30	8,580.0	-722.1	9,986.5	515,518.56	569,788.68	32° 25' 1.897 N	104° 14' 28.075 W
18,000.0	90.00	90.30	8,580.0	-722.6	10,086.5	515,518.04	569,888.68	32° 25' 1.891 N	104° 14' 26.908 W
18,100.0	90.00	90.30	8,580.0	-723.1	10,186.5	515,517.52	569,988.68	32° 25' 1.885 N	104° 14' 25.742 W
18,200.0	90.00	90.30	8,580.0	-723.7	10,286.5	515,517.00	570,088.68	32° 25' 1.879 N	104° 14' 24.575 W

Database:	Compass_17	**Local Co-ordinate Reference:**	Well WATER BUFFALO STATE COM 214H
Company:	NEW MEXICO	**TVD Reference:**	KB @ 3217.0usft
Project:	(SP) EDDY	**MD Reference:**	KB @ 3217.0usft
Site:	WATER BUFFALO	**North Reference:**	Grid
Well:	WATER BUFFALO STATE COM 214H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

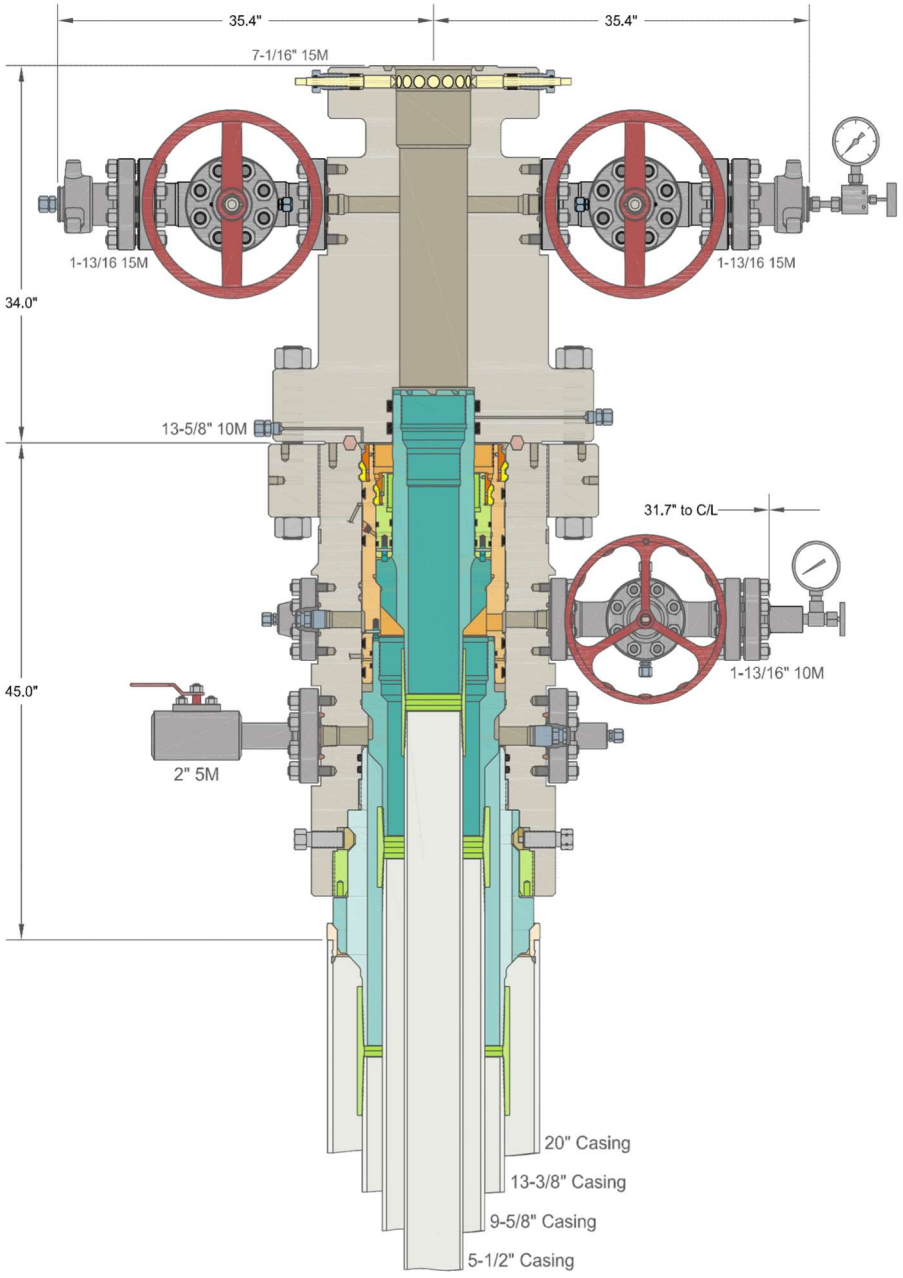
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
18,300.0	90.00	90.30	8,580.0	-724.2	10,386.5	515,516.48	570,188.68	32° 25' 1.873 N	104° 14' 23.408 W
18,400.0	90.00	90.30	8,580.0	-724.7	10,486.5	515,515.96	570,288.67	32° 25' 1.867 N	104° 14' 22.242 W
18,500.0	90.00	90.30	8,580.0	-725.2	10,586.5	515,515.44	570,388.67	32° 25' 1.861 N	104° 14' 21.075 W
18,600.0	90.00	90.30	8,580.0	-725.7	10,686.5	515,514.93	570,488.67	32° 25' 1.855 N	104° 14' 19.908 W
18,700.0	90.00	90.30	8,580.0	-726.2	10,786.5	515,514.41	570,588.67	32° 25' 1.849 N	104° 14' 18.742 W
18,800.0	90.00	90.30	8,580.0	-726.8	10,886.5	515,513.89	570,688.67	32° 25' 1.843 N	104° 14' 17.575 W
18,900.0	90.00	90.30	8,580.0	-727.3	10,986.5	515,513.37	570,788.67	32° 25' 1.837 N	104° 14' 16.409 W
18,911.3	90.00	90.30	8,580.0	-727.3	10,997.8	515,513.31	570,799.94	32° 25' 1.837 N	104° 14' 16.277 W
TD at 18911.3 - LTP/BHL WB 214H									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP WB 214H	0.00	0.01	8,580.0	-673.0	514.2	515,567.67	560,316.29	32° 25' 2.451 N	104° 16' 18.584 W
- plan misses target center by 197.8usft at 8526.8usft MD (8437.9 TVD, -673.7 N, 651.8 E)									
- Point									
LTP/BHL WB 214H	0.00	0.01	8,580.0	-727.3	10,997.8	515,513.31	570,799.94	32° 25' 1.837 N	104° 14' 16.277 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,000.0	1,000.0	0.0	0.0	Start Build 2.00
1,360.8	1,359.9	-18.0	13.8	Start 6380.8 hold at 1360.8 MD
7,741.6	7,690.1	-654.9	500.4	Start Drop -2.00
8,102.4	8,050.0	-673.0	514.2	Start 52.5 hold at 8102.4 MD
8,154.9	8,102.5	-673.0	514.2	Start DLS 12.00 TFO 90.30
8,904.9	8,580.0	-675.5	991.6	Start 10006.3 hold at 8904.9 MD
18,911.3	8,580.0	-727.3	10,997.8	TD at 18911.3



ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC	CENTENNIAL RESOURCE DEVELOPMENT LEE CO, NM		
20" x 13-3/8" x 9-5/8" x 5-1/2" 10M MBU-3T-CFL-R-DBLO System With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head, 20" Landing Ring & Pin Down Mandrel Casing Hangers	DRAWN	DLE	10JUN20
	APPRV		
	DRAWING NO.	HBE0000338	

Permian Resources
Multi-Well Pad Batch Drilling Procedure

Surface Casing - PR intends to Batch set all surface casing to a depth approved in the APD. Surface Holes will be batch drilled by a rig. Appropriate notifications will be made prior to spudding the well, running and cementing casing and prior to skidding to the rig to the next well on pad.

1. Drill Surface hole to Approved Depth with Rig and perform wellbore cleanup cycles. Trip out and rack back drilling BHA.
2. Run and land planned surface casing see Illustration 1-1 Below to depth approved in APD.
3. Set packoff and test to 5k psi
4. Offline Cement
5. Install wellhead with pressure gauge and nightcap. Nightcap is shown on final wellhead Stack up Illustration #2-2.
6. Skid Rig to adjacent well to drill Surface hole.
7. Surface casing test will be performed by the rig in order to allow ample time for Cement to develop 500psi compressive strength. Casing test to 0.22 psi/ft or 1500 psi whichever is greater - not to exceed 70% casing burst.

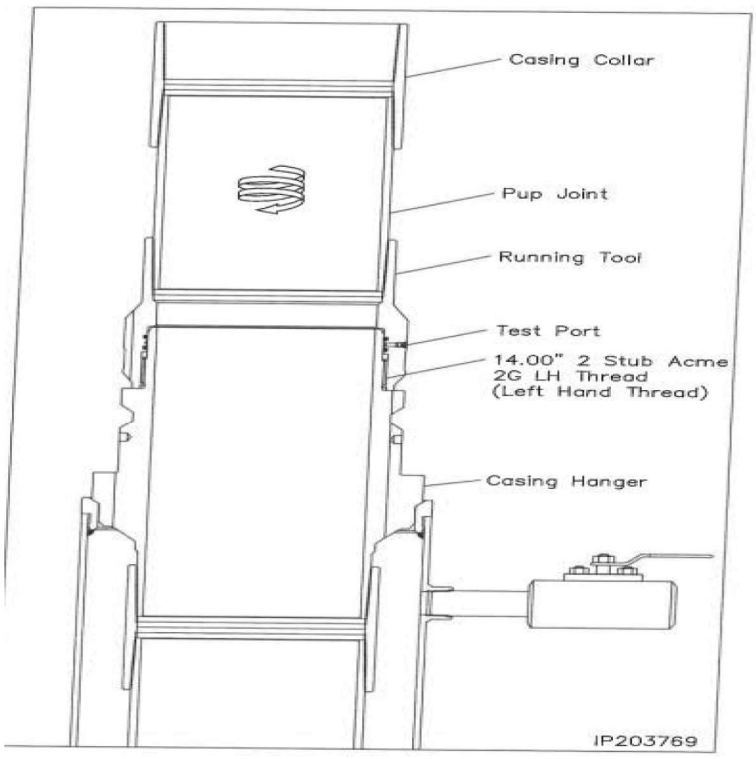


Illustration 1-1

Intermediate Casing – PR intends to Batch set all intermediate casing strings to a depth approved in the APD. Intermediate Holes will be batch drilled by the rig. Appropriate notifications will be made prior to testing BOPE, and prior to running/cementing all casing strings.

1. Rig will remove the nightcap and install and test BOPE.
2. Test Surface casing per COA WOC timing (.22 psi/ft or 1500 psi whichever is greater) - not to exceed 70% casing burst. Cement must have achieved 500psi compressive strength prior to test.
3. Install wear bushing then drill out surface casing shoe-track plus 20' and conduct FIT to minimum of the MW equivalent anticipated to control the formation pressure to the next casing point.
4. Drill Intermediate hole to approved casing point. Trip out of hole with BHA to run Casing.
5. Remove wear bushing then run and land Intermediate Casing with mandrel hanger in wellhead.
6. Cement casing to surface with floats holding.
7. Washout stack then run wash tool in wellhead and wash hanger and pack-off setting area.
8. Install pack-off and test void to 5,000 psi for 15 minutes. Nightcap shown on final wellhead stack up illustration 2-2 on page 3.
9. Test casing per COA WOC timing (.22 psi/ft or 1500 psi whichever is greater) - not to exceed 70% casing burst. Cement must have achieved 500psi compressive strength prior to test.
10. Install nightcap – skid rig to adjacent well to drill Intermediate hole.

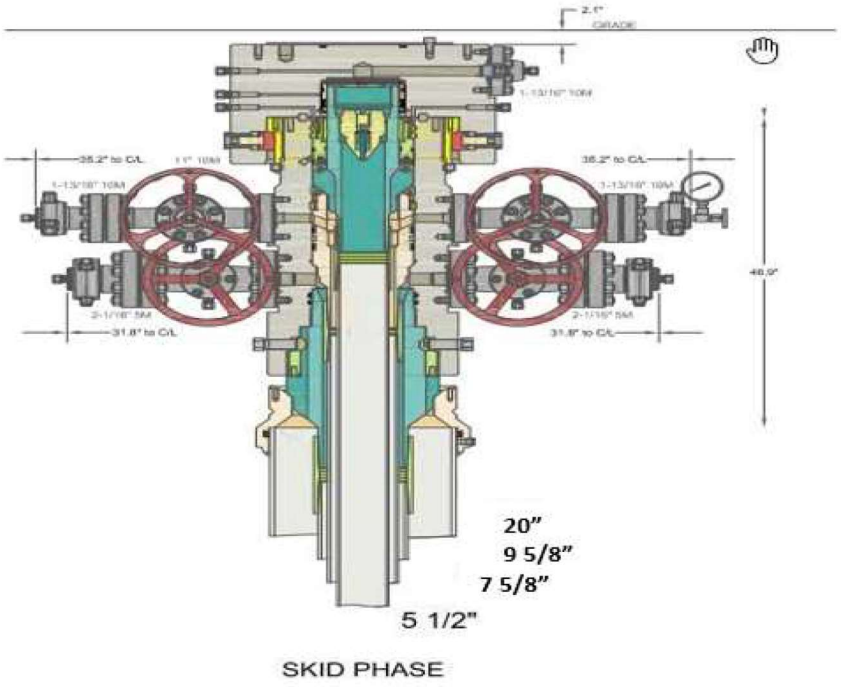


Illustration 2-2

Production Casing – PR intends to Batch set all Production casings with Rig. Appropriate notifications will be made prior Testing BOPE, and prior to running/cementing all casing strings.

1. Drilling Rig will remove the nightcap and install and test BOPE.
2. Install wear bushing then drill Intermediate shoe-track plus 20' and conduct FIT to minimum MW equivalent to control the formation pressure to TD of well.
3. Drill Vertical hole to KOP – Trip out for Curve BHA.
4. Drill Curve, landing in production interval – Trip for Lateral BHA.
5. Drill Lateral / Production hole to Permitted BHL, perform cleanup cycles and trip out to run Production Casing.
6. Remove wear bushing then run Production casing to TD landing casing mandrel in wellhead.
7. Cement Production string with floats holding.
8. Run in with wash tool and wash wellhead area – install pack-off and test void to 5,000psi for 15 minutes.
9. Install BPV in Production mandrel hanger – Nipple down BOPE and install nightcap.
10. Test nightcap void to 5,000 psi for 30 minutes per illustration 2-2
11. Skid rig to adjacent well on pad to drill production hole.

Continental

ContiTech Fluid Technology

ContiTech Oil & Marine Corp. # 11535 Brittmoore Park Dr., Houston, TX 77041-6916 USA

CONSIGNEE / Ship-to address:

HELMERICH & PAYNE INT'L DRILLING CO
ATTN: FLEX RIG WHSE - B-BAY
210 MAGNOLIA DRIVE
GALENA PARK TX 77547

Buyer:

HELMERICH & PAYNE INT'L DRILLING CO
1437 SOUTH BOULDER
74119 TULSA

Conditions

Incoterms EXW Houston
Ex Works

Packing list / Delivery note

Document No.	**71461553**
Document Date	28.01.2022
Customer Number	11697
Customer VAT No.	
Supplier Number	
Purchase Order No.	740362040
Purchase Order Date	18.01.2022
Sales Order Number	1388153
Sales Order Date	18.01.2022
Unloading Point	
RAN-No.	

Page 1 of 2

Weights (Gross / Net)	
Total Gross Weight	2,507.000 LB
Total Net Weight	2,507.000 LB

Item	Material/Description	Quantity	Net Weight	Gross Weight
	Buyer: Jack Peebles *E-mail: Jackie.Peebles@hpinc.com* *Tel: 832-782-6000* *Rig/Whse: HOW*			
20	00RECERTIFY Recert of HP Hoses Serial# 67094 Commodity Code: 3" X 35 FT 10K Choke & Kill Hoses API 16C End 1: 4 - 1/16" 10Kpsi API Spec 6A Type 6BX Flange End 2: 4 - 1/16" 10Kpsi API Spec 6A Type 6BX Flange c/w BX155 ring groove each end Standard: API Spec 16C - Monogrammed Working Pressure: 10,000psi Test Pressure: 15,000psi Inspection & Certification includes: External inspection of the hose & couplings Internal boroscopic inspection of hose liner Hydrostatic pressure test of hose assembly Repair of any external damage to hose body and end connections (limited to minor repairs). Clean & protect end connections Inspection Report Disposal of hose assembly if hose fails inspection and recertification process. Please Flush Hoses before sending them to our Facility.	1 PC	2,507.000 LB	2,507.000 LB

8800240
Y106-01-0101
2.9.22

Record Rotary Hose sleeve number on the CBC Made Hose List !

Hydrostatic Test Certificate

ContiTech

Certificate Number	COM Order Reference	Customer Name & Address
H100122	1388153	HELMERICH & PAYNE DRILLING CO 1434 SOUTH BOULDER AVE TULSA, OK 74119 USA
Customer Purchase Order No:	740362040	
Project:		

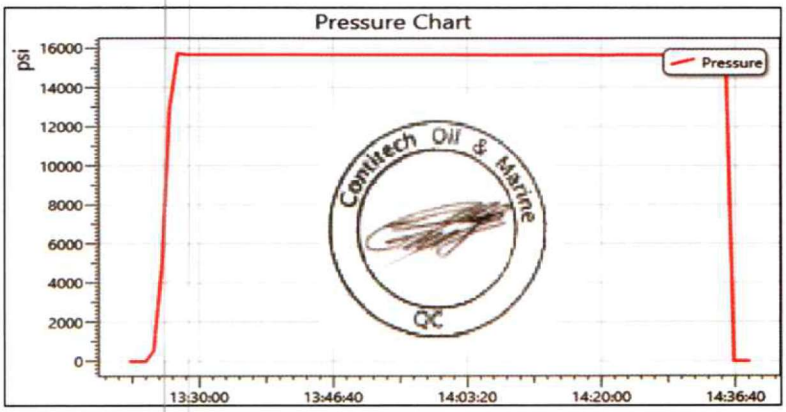
Test Center Address	Accepted by COM Inspection	Accepted by Client Inspection
ContiTech Oil & Marine Corp. 11535 Brittmoore Park Drive Houston, TX 77041 USA	Signed: Gerson Mejia-Lazo Date: 02/09/22	

We certify that the goods detailed hereon have been inspected as described below by our Quality Management System, and to the best of our knowledge are found to conform the requirements of the above referenced purchase order as issued to ContiTech Oil & Marine Corporation.

Item	Part No.	Description	Qnty	Serial Number	Work. Press. (psi)	Test Press. (psi)	Test Time (minutes)
20	RECERTIFICATION	3" ID 10K Choke and Kill Hose x 35ft OAL	1	67094	10,000	15,000	60

Record Information	
Start Time	1/27/2022 13:21:21
End Time	1/27/2022 14:38:28
Interval	00:01:00
Number	78
MaxValue	15849
MinValue	-3
AvgValue	14240
RecordName	67094-sh
RecordNumber	199

Gauge Information	
Model	ADT680
SN	21817380014
Range	(0-40000)psi
Unit	psi



Permian Resources
BOP Break Testing Variance Procedure

Subject: Request for a Variance Allowing break Testing of the Blowout Preventer Equipment (BOPE). Permian Resources requests a variance to ONLY test broken pressure seals on the BOPE and function test BOP when skidding a drilling rig between multiple wells on a pad.

Background

Title 43 CFR 3172, Drilling Operations, Sections 6.b.9.iv states that the BOP test must be performed whenever any seal subject to test pressure is broken. The current interpretation of the Bureau of Land Management (BLM) requires a complete BOP test and not just a test of the affected component. 43 CFR 3172.13, Variances from minimum standards states, "An operator may request the authorized officer to approve a variance from any of the minimum standards prescribed in §§ 3172.6 through 3172.12. All such requests shall be submitted in writing to the appropriate authorized officer and provide information as to the circumstances which warrant approval of the variance(s) requested and the proposed alternative methods by which the related minimum standard(s) are to be satisfied. The authorized officer, after considering all relevant factors, if appropriate, may approve the requested variance(s) if it is determined that the proposed alternative(s) meet or exceed the objectives of the applicable minimum standard(s).". Permian Resources feels the break testing the BOPE is such a situation. Therefore, as per 43 CFR 3172.13, Permian Resources submits this request for the variance.

Supporting Documentation

The language used in 43 CFR 3172 became effective on December 19, 1988 and has remained the standard for regulating BLM onshore drilling operations for over 30 years. During this time, there have been significant changes in drilling technology. The BLM continues to use the variance request process to allow for the use of modern technology and acceptable engineering practices that have arisen since 43 CFR 3172 was originally released. The Permian Resources drilling rig fleet has many modern upgrades that allow the intact BOP stack to be moved between well slots on a multi-well pad, as well as, wellhead designs that incorporate quick connects facilitating release of the BOP from the wellhead without breaking any BOP stack components apart. These technologies have been used extensively offshore, and other regulators, API, and many operators around the world have endorsed break testing as safe and reliable.

Figure 1: Winch System attached to BOP Stack

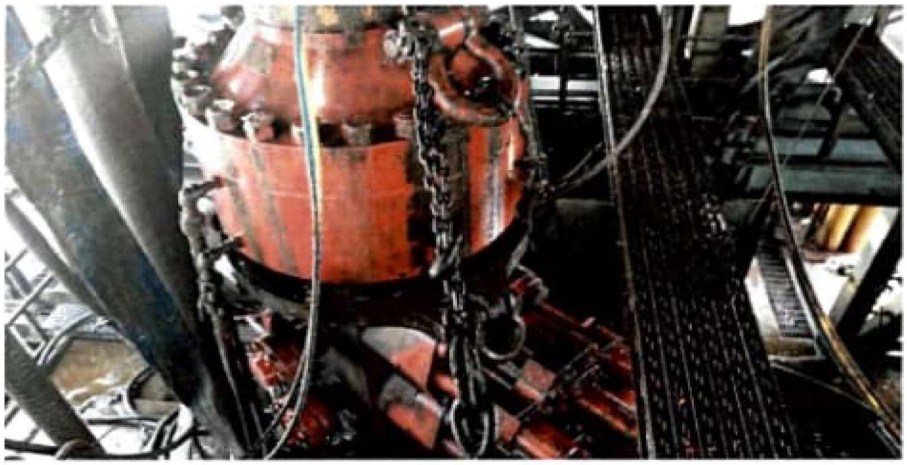
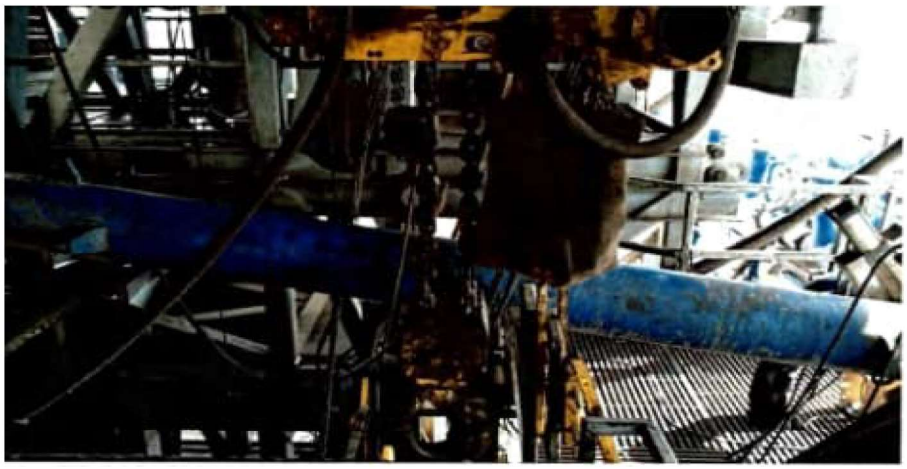


Figure 2: BOP Winch System



American Petroleum Institute (API) standards, specification and recommended practices are considered the industry standard and are consistently utilized and referenced by the industry. 43 CFR 3172 recognizes API recommended Practices (RP) 53 in its original development. API Standard 53, Well Control Equipment Systems for Drilling Wells (Fifth Edition, December 2018, Annex C, Table C.4) recognizes break testing as an acceptable practice. Specifically, API Standard 53, Section 5.3.7.1 states "A pressure test of the pressure containing component shall be performed following the disconnection or repair, limited to the affected component." See Table C.4 below for reference.

62 API STANDARD 53

Table C.4—Initial Pressure Testing, Surface BOP Stacks

Component to be Pressure Tested	Pressure Test—Low Pressure[a,c] psig (MPa)	Pressure Test—High Pressure[a,c]	
		Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer[b]	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers[b,c]	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes[e]	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes[e]	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or MASP for the well program, whichever is lower	
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	

[a] Pressure test evaluation periods shall be a minimum of five minutes.
No visible leaks.
The pressure shall remain stable during the evaluation period. The pressure shall not decrease below the intended test pressure.

[b] Annular(s) and VBR(s) shall be pressure tested on the largest and smallest OD drill pipe to be used in well program.

[c] For pad drilling operations, moving from one wellhead to another within the 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

[d] For surface offshore operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented during the initial test. For land operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented at commissioning and annually.

[e] Adjustable chokes are not required to be full sealing devices. Pressure testing against a closed choke is not required.

The Bureau of Safety and Environmental Enforcement (BSEE), Department of Interior, has also utilized the API standards, specification and best practices in the development of its offshore oil and gas regulations and incorporates them by reference within its regulations.

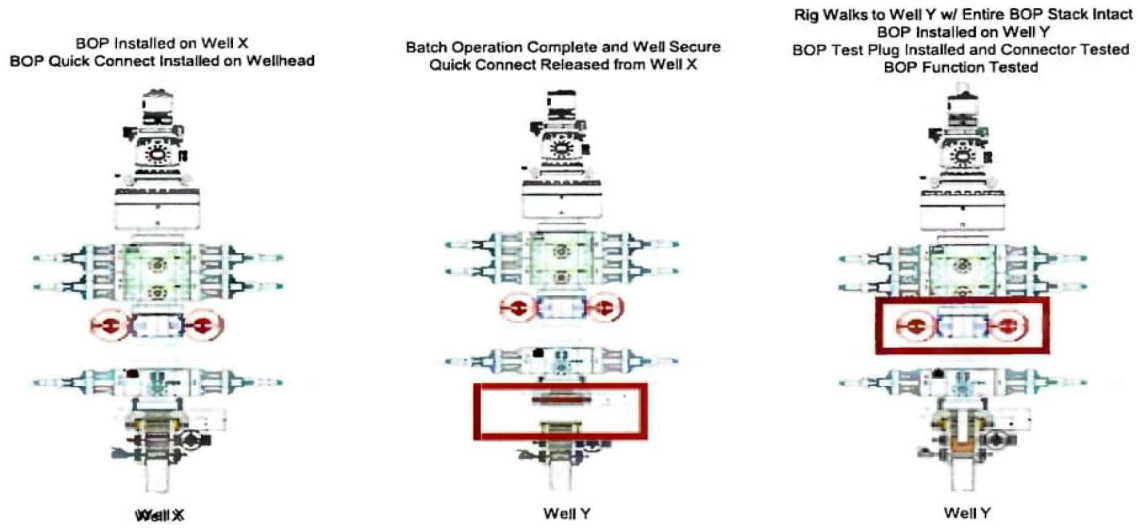
Break testing has been approved by the BLM in the past with other operators based on the detailed information provided in this document.

Permian Resources feels break testing and our current procedures meet the intent of 43 CFR 3172 and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. Permian Resources internal standards require complete BOPE tests more often than that of 43 CFR 3172 (every 21 days). In addition to function testing the annular, pipe rams and blind rams after each BOP nipple up, Permian Resources performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of 43 CFR 3172.

Procedures

1) Permian Resources will use this document for our break testing plan for New Mexico Delaware Basin. The summary below will be referenced in the APD or Sundry Notice and receive approval prior to implementing this variance.
2) Permian Resources will perform BOP break testing on multi-wells pads where multiple intermediate sections can be drilled and cased within the 21-day BOP test window.
   a)A full BOP test will be conducted on the first well on the pad.
   b)The first intermediate hole section drilled on the pad will be the deepest. All the remaining hole sections will be the same formation depth or shallower.
   c) A full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
   d) A full BOP test will be required prior to drilling any production hole.
3) After performing a complete BOP test on the first well, the intermediate hole section will be drilled and cased, two breaks would be made on the BOP equipment.
   a) Between the HCV valve and choke line connection
   b)Between the BOP quick connect and the wellhead
4) The BOP is then lifted and removed from the wellhead by a hydraulic system.
5) After skidding to the next well, the BOP is moved to the wellhead by the same hydraulic system and installed.
6) The connections mentioned in 3a and 3b will then be reconnected.
7) Install test plug into the wellhead using test joint or drill pipe.
8) A shell test is performed against the upper pipe rams testing the two breaks.
9) The shell test will consist of a 250 psi low test and a high test to the value submitted in the APD or Sundry (e.g. 5,000 psi or 10,000psi).
10) Function tests will be performed on the following components: lower pipe rams, blind rams, and annular.
11) For a multi-well pad the same two breaks on the BOP would be made and on the next wells and steps 4 through 10 would be repeated.
12) A second break test would only be done if the intermediate hole section being drilled could not be completed within the 21 day BOP test window.

Note: Picture below highlights BOP components that will be tested during batch operations



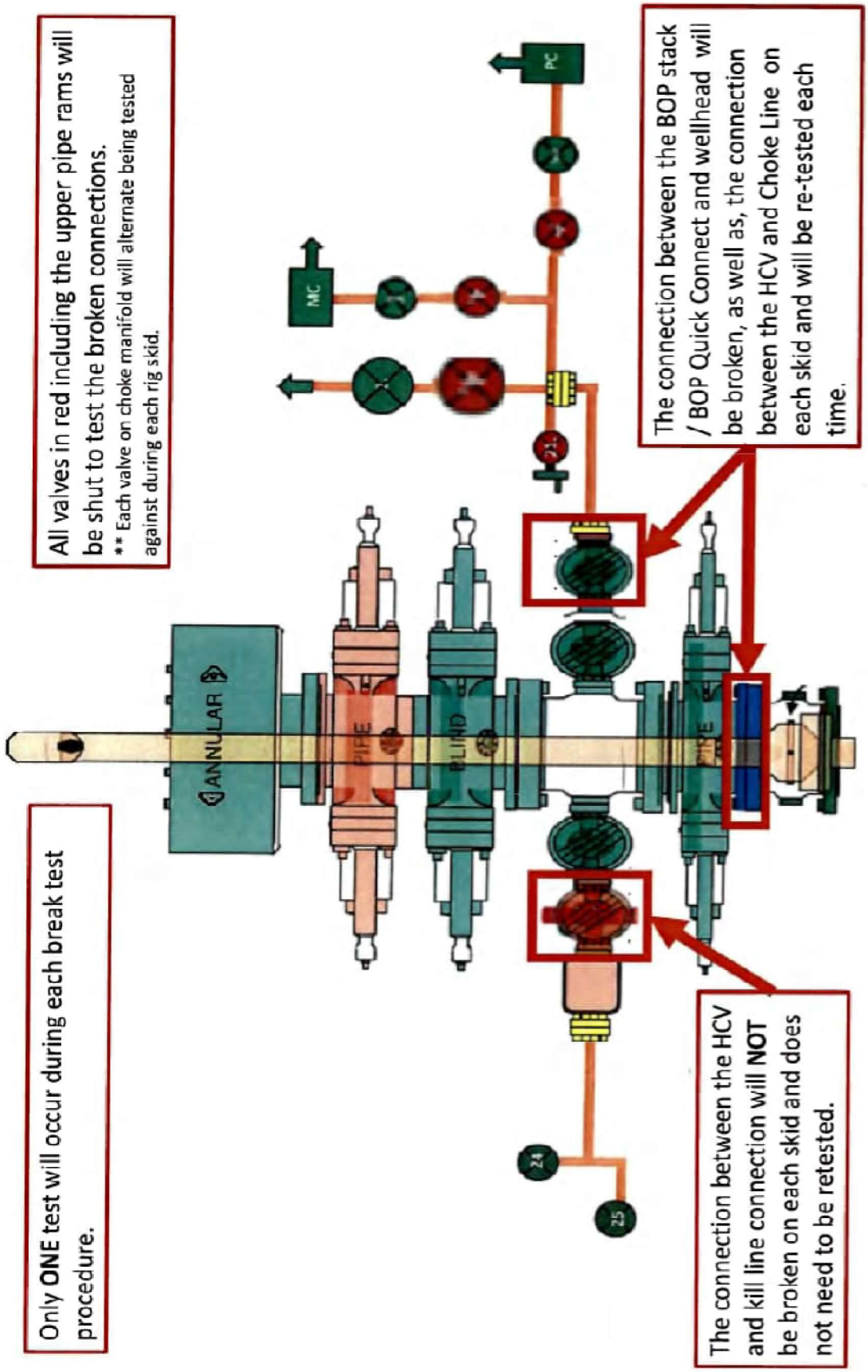
Summary

A variance is requested to ONLY test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API Standard 53 states, that for pad drilling operations, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control
event occurs prior to the commencement of a BOPE Break Testing operation.

Based on public data and the supporting documentation submitted herein to the BLM, we will request permission to ONLY retest broken pressure seals if the following conditions are met:

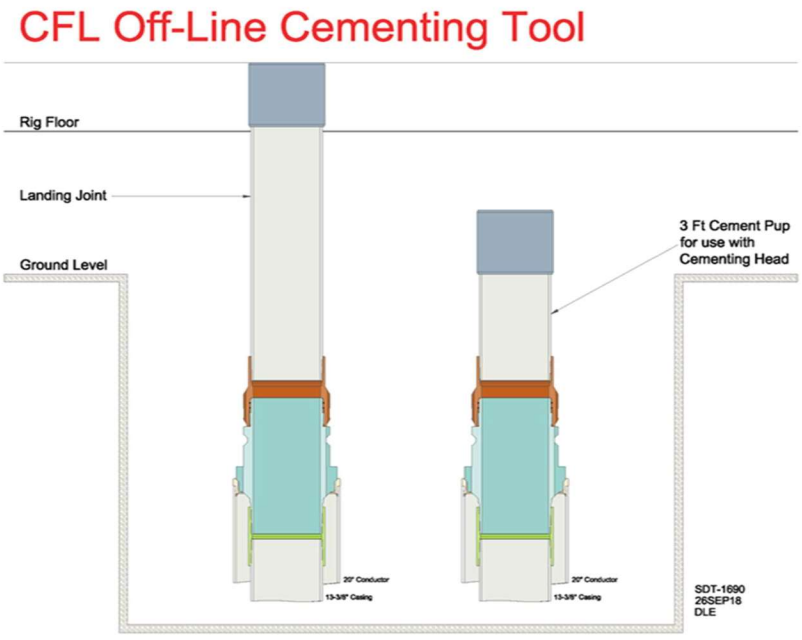
1) After a full BOP test is conducted on the first well on the pad.
2) The first intermediate hole section drilled on the pad will be the deepest. All the remaining hole sections will be the same depth or shallower.
3) A full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
4) A full BOP test will be required prior to drilling the production hole.


All valves in red including the upper pipe rams will be shut to test the broken connections.
** Each valve on choke manifold will alternate being tested against during each rig skid.
The connection between the BOP stack / BOP Quick Connect and wellhead will be broken, as well as, the connection between the HCV and Choke Line on each skid and will be re-tested each time.
Only ONE test will occur during each break test procedure.
The connection between the HCV and kill line connection will NOT be broken on each skid and does not need to be retested.
ANNULAR
PIPE
BLIND
PIPE
MC
PC
21
24
25

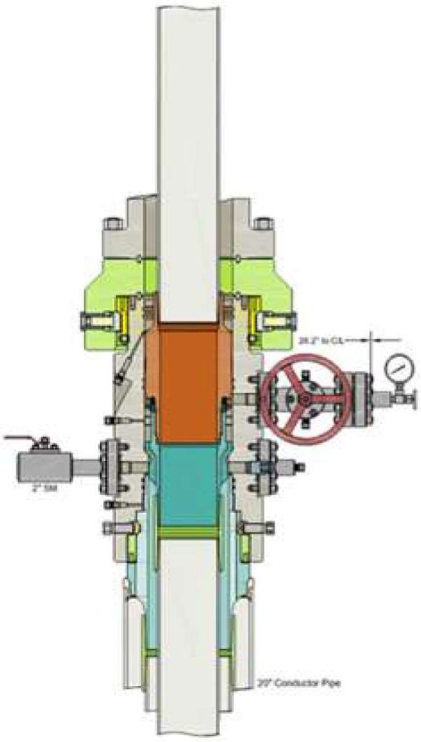
Permian Resources Offline Cementing Procedure
Surface & Intermediate Casing

1. Drill hole to Total Depth with Rig and perform wellbore cleanup cycles.
2. Run and casing to Depth.
3. Land casing with mandrel.
4. Circulate 1.5 csg capacity.
5. Flow test – Confirm well is static and floats are holding.
6. Set Annular packoff and pressure test. Test to 5k.
7. Nipple down BOP and install cap flange.
8. Skid rig to next well on pad
9. Remove cap flange (confirm well is static before removal)
    a) If well is not static use the casing outlet valves to kill well
    b) Drillers method will be used in well control event
    c) High pressure return line will be rigged up to lower casing valve and run to choke manifold to control annular pressure
    d) Kill mud will be circulated once influx is circulated out of hole
    e) Confirm well is static and remove cap flange to start offline cement operations
10. Install offline cement tool.
11. Rig up cementers.
12. Circulate bottoms up with cement truck
13. Commence planned cement job, take returns through the annulus wellhead valve
14. After plug is bumped confirm floats hold and well is static
15. Rig down cementers and equipment
16. Install night cap with pressure gauge to monitor.

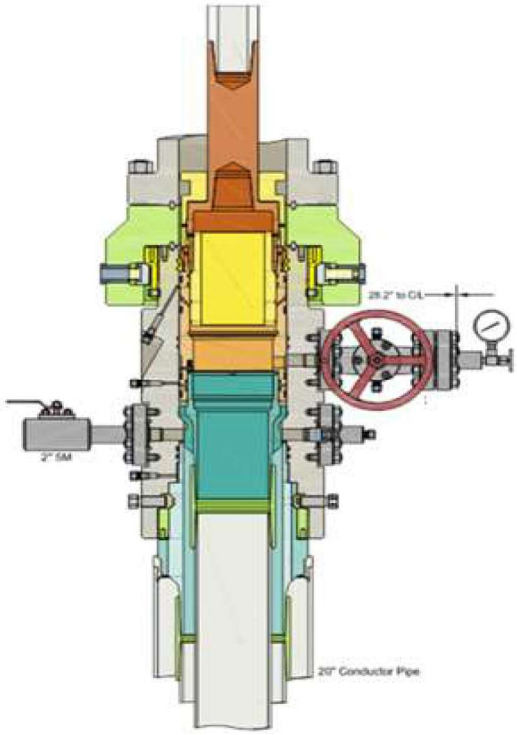
13 3/8" Surface



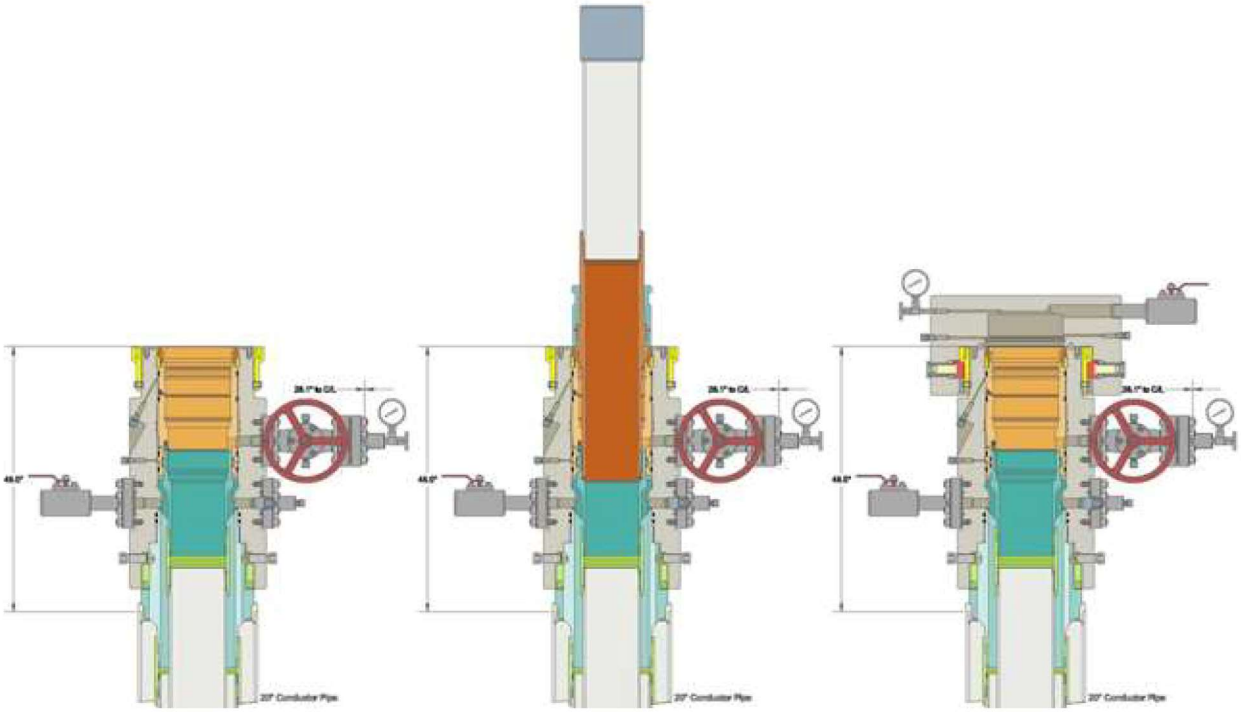
Intermediate



Run 7 5/8" Casing
Land Casing on 7 5/8" Mandrel Hanger
Cement 7 5/8" Casing
Retrieve Running Tool



Run 9 5/8" Packoff
Test Upper and Lower Seals
Engage Lockring
Retrieve Running Tool





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

CONDITIONS

Operator:	OGRID:
Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	372165
	Action Number: 487497
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
matthew.gomez	Administrative order required for non-standard location prior to production.	8/8/2025
matthew.gomez	Property code is now 337699	8/8/2025
matthew.gomez	Please adhere to all C-102 instructions such as "Operators must outline the dedicated acreage in a red box..."	8/8/2025
matthew.gomez	Any previous COA's not addressed within the updated COA's still apply.	8/8/2025