

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

5. Lease Serial No. NMNM139373

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

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

2. Name of Operator EARTHSTONE OPERATING LLC

3a. Address 300 N MARIENFIELD STREET SUITE 1000, MID3b. Phone No. (include area code)
(432) 695-4222

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)
//

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No. EL CAMPEON SOUTH FED COM/2

9. API Well No. 3002548142

10. Field and Pool or Exploratory Area
WC-025 G-08 S263412K,/BONE SPRING

11. Country or Parish, State
LEA/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other	
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

API: 30-025-48142

WELL NAME

FROM: EL CAMPEON SOUTH FEDERAL COM 201H

TO: EL CAMPEON FED COM 301H;

SURFACE HOLE LOCATION

FROM: E-29-26S-35E; 1828' FNL, 707' FWL

TO: E-29-26S-35E; 1828' FNL, 692' FWL;

FIRST TAKE POINT

FROM: L-29-26S-35E; 2543' FSL, 989' FWL

TO: L-29-26S-35E; 2543' FSL, 989' FWL;

STATE LINE CROSSING

LOT 4-32-26S-35E; 0'FSL, 660' FWL;

Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
JENNIFER ELROD / Ph: (940) 452-6214

Senior Regulatory Analyst

Title

(Electronic Submission)

Signature

Date

01/15/2024

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved

Petroleum Engineer

Title

01/29/2024

Date

Conditions of approval, if any, are attached. Approval of this notice 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.

CARLSBAD

Office

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.

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Additional Remarks

LAST TAKE POINT/BOTTOM HOLE LOCATION

FROM: LOT 4-32-26S-35E; LEA COUNTY, NEW MEXICO

TO: SECT. 25, BLOCK C-24, PUBLIC SCHOOL LANDS SURVEY A-701, LOVING COUNTY, TEXAS

Location of Well

0. SHL: TR E / 1828 FNL / 707 FWL / TWSP: 26S / RANGE: 35E / SECTION: 29 / LAT: 32.0165065 / LONG: -103.3956501 (TVD: 0 feet, MD: 0 feet)

PPP: TR L / 2642 FSL / 991 FWL / TWSP: 26S / RANGE: 35E / SECTION: 29 / LAT: 32.014265 / LONG: -103.394732 (TVD: 10967 feet, MD: 11150 feet)

PPP: TR C / 0 FNL / 991 FWL / TWSP: 26S / RANGE: 35E / SECTION: 29 / LAT: 32.007002 / LONG: -103.394722 (TVD: 11000 feet, MD: 13800 feet)

BHL: LOT 4 / 10 FSL / 989 FWL / TWSP: 26S / RANGE: 35E / SECTION: 32 / LAT: 32.0003198 / LONG: -103.3947172 (TVD: 11000 feet, MD: 16218 feet)

CONFIDENTIAL

☒ AMENDED REPORT
WELL NAME/NUMBER, SHL, FTP, LTP, BHL,
STATE LINE CROSSING

***BHL & LTP WILL BE IN TEXAS**

EARTHSTONE OPERATING, LLC

SHEET NO. 1 OF 1

NATURE OF WORK PAD SITE EXHIBIT

DATE 11-29-23SRID NO.

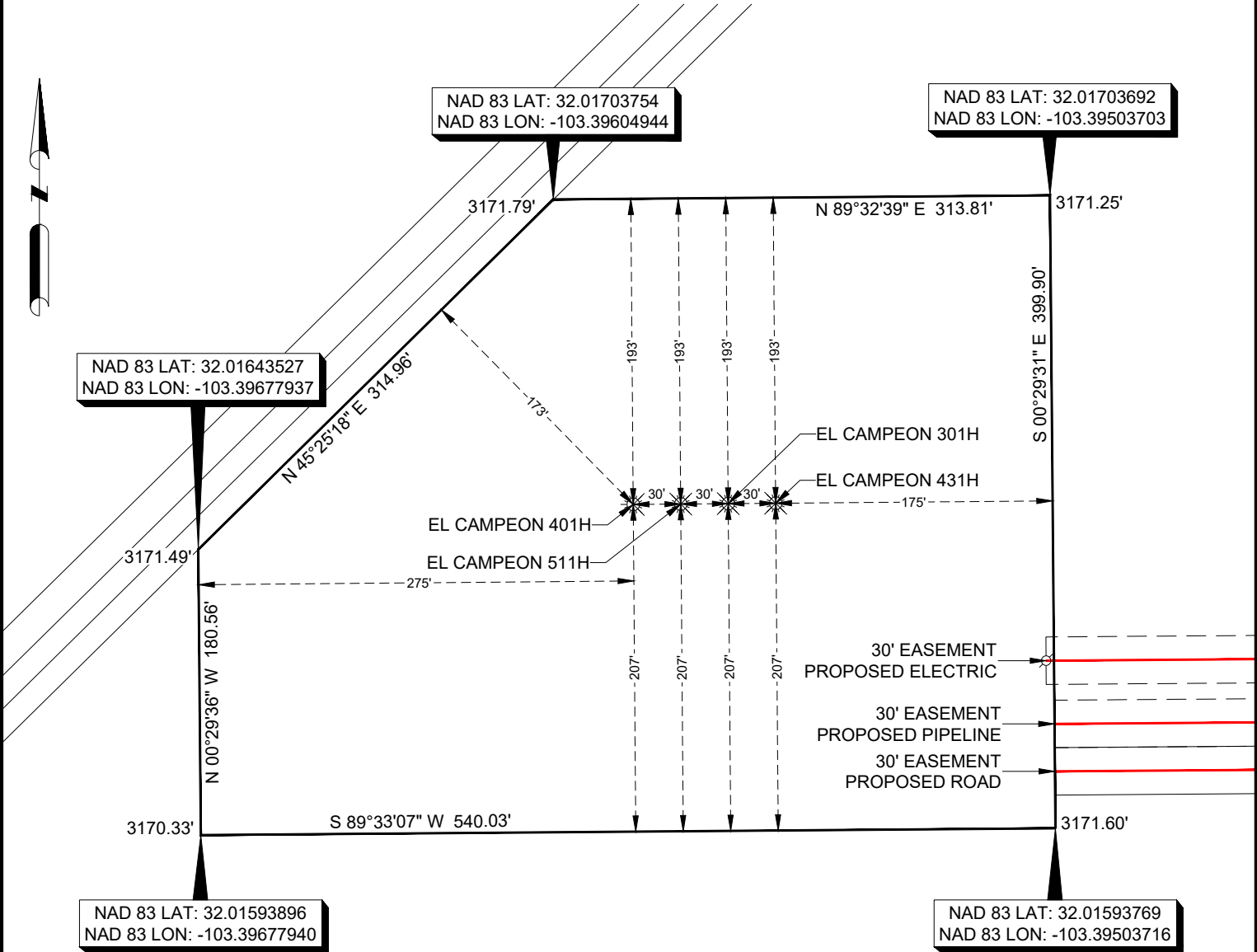
PROJECT- EL CAMPEON SOUTH PAD 1

JOB OR AFE

SEC. 29TWP 35ERANGE 26SMERIDIAN NEW MEXICO PRINCIPAL MERIDIANCO. LEASTATE NEW MEXICO

REMARKS TOTAL AREA= 4.388 ACRES (191,140 SQUARE FEET)

RE:☐ AS-BUILT☒ STAKING

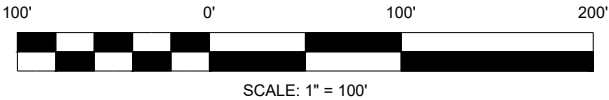


EL CAMPEON 401H SURFACE HOLE LOCATION	
ELEVATION 3170.47'	
NEW MEXICO EAST - NAD 83	
NORTHING	371004.35
EASTING	831886.77
LATITUDE	32.016507°
LONGITUDE	-103.395892°
NEW MEXICO EAST - NAD 27	
NORTHING	370947.24
EASTING	790698.35
LATITUDE	32.016380°
LONGITUDE	-103.395432°

EL CAMPEON 511H SURFACE HOLE LOCATION	
ELEVATION 3170.29'	
NEW MEXICO EAST - NAD 83	
NORTHING	371004.59
EASTING	831916.77
LATITUDE	32.016507°
LONGITUDE	-103.395795°
NEW MEXICO EAST - NAD 27	
NORTHING	370947.49
EASTING	790728.35
LATITUDE	32.016380°
LONGITUDE	-103.395336°

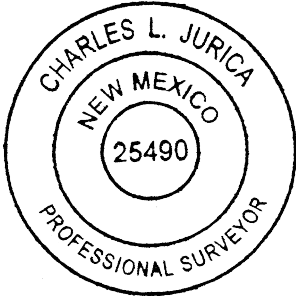
EL CAMPEON 301H SURFACE HOLE LOCATION	
ELEVATION 3169.81'	
NEW MEXICO EAST - NAD 83	
NORTHING	371004.84
EASTING	831946.77
LATITUDE	32.016507°
LONGITUDE	-103.395698°
NEW MEXICO EAST - NAD 27	
NORTHING	370947.73
EASTING	790758.35
LATITUDE	32.016380°
LONGITUDE	-103.395239°

EL CAMPEON 431H SURFACE HOLE LOCATION	
ELEVATION 3170.57'	
NEW MEXICO EAST - NAD 83	
NORTHING	371005.08
EASTING	831976.77
LATITUDE	32.016507°
LONGITUDE	-103.395602°
NEW MEXICO EAST - NAD 27	
NORTHING	370947.98
EASTING	790788.35
LATITUDE	32.016380°
LONGITUDE	-103.395142°



NOTES:

1. BEARINGS, DISTANCES, AREA AND COORDINATES SHOWN HEREON ARE CORRELATED TO THE NEW MEXICO STATE PLANE COORDINATE SYSTEM OF 1983, EAST ZONE, AS DETERMINED BY GPS OPUS OBSERVATIONS. ALL BEARINGS AND DISTANCES SHOWN ARE GRID.
2. LATITUDE & LONGITUDE ARE NAD 83 DECIMAL GEOGRAPHIC.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND THE REVIEW OF THE ABSTRACT OF TITLE. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF ALL IMPROVEMENTS WAS BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAS BEEN SPECIFICALLY OMITTED. VESTING DOCUMENTS NOT FURNISHED FOR THIS SURVEY.



DATE: 11-29-23 DATE SURVEYED 11-13-23 DRAFT MHC

JOB NO. 21497 FIELD BOOK V. KK1, P. 63 REV. 0

FILE 21497 EL CAMPEON SOUTH PAD 1 PLAT



TBPELS FIRM# 10194245
201 West Wall Street, Suite 325
Midland, TX 79701
(817) 529-1180 ~ Fax (817) 529-1181

I, CHUCK JURICA, A NEW MEXICO PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

12/13/2023

CHARLES JURICA NEW MEXICO LICENSE # 25490 DATE

Permian Resources - El Campeon Fed Com 301H

1. Geologic Formations

Formation	Lithology	Elevation	TVD	Target
Rustler	Sandstone	2162	1040	No
Top of Salt	Salt	1702	1500	No
Lamar	Anhydrite/Shale	-2132	5334	No
Capitan	Limestone	NP	NP	No
Cherry Canyon	Sandstone	-2176	5378	No
Brushy Canyon	Sandstone	NP	NP	No
Bone Spring Lime	Limestone	-6072	9274	No
1st Bone Spring Sand	Sandstone/Limestone/Shale	-7398	10600	No
2nd Bone Spring Sand	Sandstone/Limestone/Shale	-7860	11062	No
3rd Bone Spring Sand	Sandstone/Limestone/Shale	-8940	12142	Yes
Wolfcamp A/XY	Sandstone/Limestone/Shale	-9352	12554	No
Wolfcamp B	Sandstone/Limestone/Shale	-9774	12976	No

2. Blowout Prevention

BOP installed and tested before drilling	Size?	Min. Required WP	Type	x	Tested to:
8.75	13-5/8"	5M	Annular	x	5000 psi
			Blind Ram	x	5000 psi
			Pipe Ram	x	
			Double Ram		
			Other*		
6.75	13-5/8"	10M	Annular	x	50% testing pressure
			Blind Ram	x	5000 psi
			Pipe Ram	x	
			Double Ram		
			Other*		

Equipment: 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 the components installed will be functional and tested. All BOPE connections shall be flanged, welded or clamped. All choke lines shall be straight unless targeted with running tees or tee blocks are used, and choke lines shall be anchored to prevent whip and reduce vibrations. All valves in the choke line & the choke manifold shall be full opening as to not cause restrictions and to allow for straight fluid paths to minimize potential erosion. All gauges utilized in the well control system shall be of a type designed for drilling fluid service. A top drive inside BOP valve will be utilized at all times. Subs equipped with full opening valves sized to fit the drill pipe and collars will be available on the rig floor in the open position. The key to operate said valve equipped subs will be on the rig floor at all times. The accumulator system will have sufficient capacity to open the HCR and close all three sets of rams plus the annular preventer while retaining at least 300 psi above precharge on the closing manifold (accumulator system shall be capable of doing so without using the closing unit pumps). The fluid reservoir capacity will be double the usable fluid volume of the accumulator system capacity, and the fluid level will be maintained at the manufacturer's recommended level. Prior to connecting the closing unit to the BOP stack, an accumulator precharge pressure test shall be performed to ensure the precharge pressure is within 100 psi of the desired precharge pressure (only nitrogen gas will be used to precharge). Two independent power sources will be made available at all times to power the closing unit pumps so that the pumps can automatically start when the closing valve manifold pressure has decreased to the preset level. Closing unit pumps will be sized to allow opening of HCR and closing of annular preventer on 5" drill pipe achieving at least 200 psi above precharge pressure with the accumulator system isolated from service in less than two minutes. A valve shall be installed in the closing line as close to the annular preventer as possible to act as a locking device; the valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative. Remote controls capable of opening and closing all preventers & the HCR shall be readily accessible to the driller; master controls with the same capability will be operable at the accumulator. The wellhead will be a multibowl speed head allowing for hangoff of intermediate casing & isolation of the 133/8 x 95/8 annulus without breaking the connection between the BOP & wellhead to install an additional casing head. A wear bushing will be installed & inspected frequently to guard against internal wear to wellhead. VBRs (variablebore rams) will be run in upper rambody of BOP stack to provide redundancy to annular preventer while RIH w/ production casing;

Requesting Variance? YES

Variance request: Flex hose and offline cement variances, see attachments in section 8.

Testing Procedure: 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 30 day intervals e. checked daily as to mechanical operating conditions. The ram type preventer(s) will be tested using a test plug to 250 psi (low) and 5,000 psi (high) (casinghead WP) with a test plug upon its installation onto the 13 surface casing. If a test plug is not used, the ram type preventer(s) shall be tested to 70% of the minimum internal yield pressure of the casing. The annular type preventer(s) shall be tested to 3500 psi. Pressure will be maintained for at least 10 minutes or until provisions of the test are met, whichever is longer. A Sundry Notice (Form 3160 5), along with a copy of the BOP test report, shall be submitted to the local BLM office within 5 working days following the test. If the bleed line is connected into the buffer tank (header), all BOP equipment including the buffer tank and associated valves will be rated at the required BOP pressure. The BLM office will be provided with a minimum of four (4) hours notice of BOP testing to allow witnessing. The BOP Configuration, choke manifold layout, and accumulator system, will be in compliance with Onshore Order 2 for a 5,000 psi system. A remote accumulator and a multi-bowl system will be used, please see attachment in section 8 for multi-bowl procedure. Pressures, capacities, and specific placement and use of the manual and/or hydraulic controls, accumulator controls, bleed lines, etc., will be identified at the time of the BLM 'witnessed BOP test. Any remote controls will be capable of both opening and closing all preventers and shall be readily accessible.

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

3. Casing

String	Hole Size	Casing Size	Top	Bottom	Top TVD	Bottom TVD	Length	Grade	Weight	Connection	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
Surface	12.25	9.625	0	1130	0	1130	1130	J55	40	BTC	4.60	4.72	Dry	4.92	Dry	4.34
Intermediate	8.75	7.625	0	11500	0	11500	11500	P110HS	29.7	MOFXL	3.00	2.11	Dry	1.91	Dry	3.20
Production	6.75	5.5	0	11000	0	12001	11000	P110RY	20	GEOCONN	1.32	1.68	Dry	2.21	Dry	2.21
Production	6.75	5.5	11000	20042	12001	12001	9042	P110RY	20	Bushmaster SL	1.32	1.68	Dry	2.21	Dry	2.21
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	Quantity (sx)	Yield	Density	Cu Ft	Excess %	Cement Type	Additives
Surface	Lead	0	900	310	1.88	12.9	570	100%	Class C	EconoCem-HLC + 5% Salt + 5% Kol-Seal
Surface	Tail	900	1130	90	1.34	14.8	110	50%	Class C	Accelerator
Intermediate	Lead	0	9200	740	1.88	12.9	1390	50%	Class C	EconoCem-HLC + 5% Salt + 5% Kol-Seal
Intermediate	Tail	9200	11500	270	1.34	14.8	350	50%	Class C	Retarder
Production	Lead	11000	11573	60	2.41	11.5	140	40%	Class H	POZ, Extender, Fluid Loss, Dispersant, Retarder
Production	Tail	11573	20042	520	1.73	12.5	890	25%	Class H	POZ, Extender, Fluid Loss, Dispersant, Retarder

Permian Resources requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Cherry Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + Bentonite Gel (2.30 yld, 12.9 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

Permian Resources will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

Permian Resources will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

Permian Resources requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement inside the surface casing. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

Permian Resources requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure the first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

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 other 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: 7380 Cu Ft

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight	Max Weight
0	1130	Spud Mud	8.6	9.5
1130	11500	Water Based Mud	10	10
11500	11000	OBM	9	13.5
11000	20042	OBM	9	13.5

6. Test, Logging, Coring

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

Will utilize MWD/LWD (Gamma Ray logging) from intermediate hole to TD of the well.

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

DIRECTIONAL SURVEY, GAMMA RAY LOG,

Coring operation description for the well:

N/A

7. Pressure

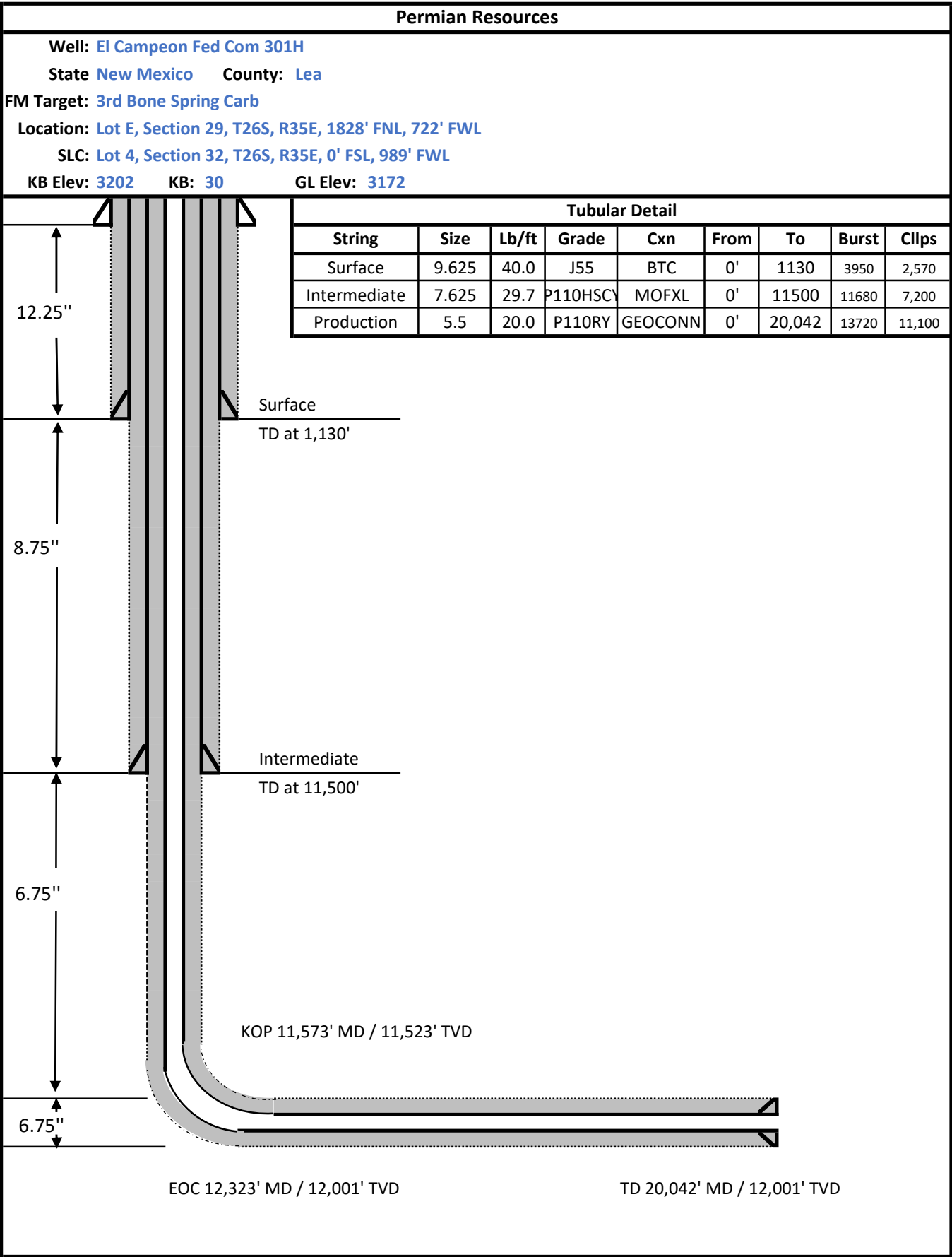
Anticipated Bottom Hole Pressure	8430	psi
Anticipated Surface Pressure	5784	psi
Anticipated Bottom Hole Temperature	174	°F
Anticipated Abnormal pressure, temp, or geo hazards	No	

8. Waste Management

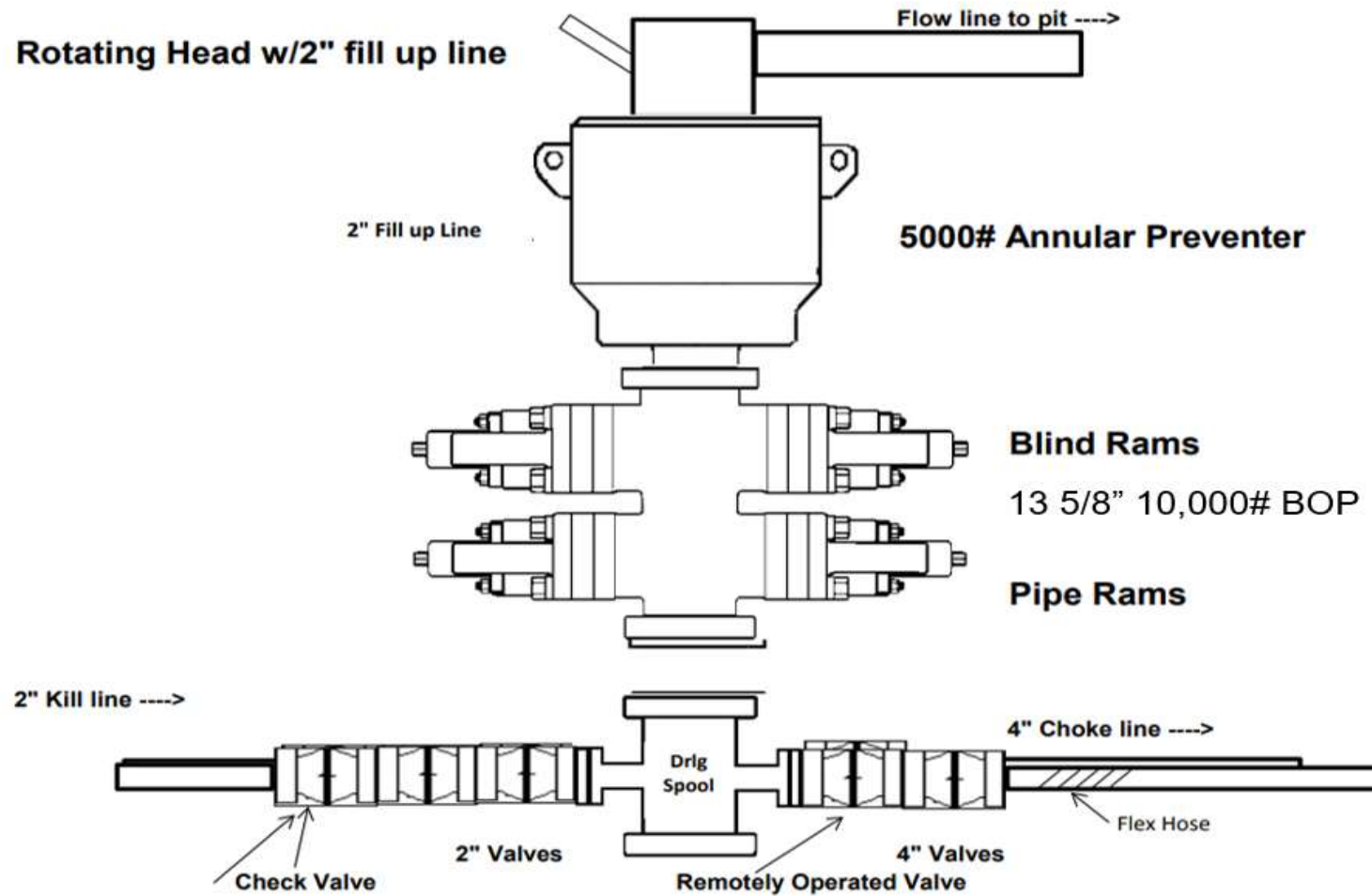
Waste Type:	Drilling
Waste content description:	Fresh water based drilling fluid
Amount of waste:	1500 bbls
Waste disposal frequency:	Weekly (after drilling all surfaces)
Safe containment description:	Steel tanks with plastic-lined containment berms
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial
Waste Type:	Grey Water & Human Waste
Waste content description:	Grey Water/Human Waste
Amount of waste:	5000 gallons
Waste disposal frequency:	Weekly
Safe containment description:	Approved waste storage tanks with containment
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial
Waste Type:	Garbage
Waste content description:	General trash/garbage
Amount of waste:	5000 lbs
Waste disposal frequency:	Weekly
Safe containment description:	Enclosed trash trailer
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial
Waste Type:	Drilling
Waste content description:	Drill Cuttings
Amount of waste:	7380 Cu Ft
Waste disposal frequency:	Per well
Safe containment description:	Steel tanks
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial
Waste Type:	Drilling
Waste content description:	Brine water based drilling fluid
Amount of waste:	1500 bbls
Waste disposal frequency:	Monthly
Safe containment description:	Steel tanks with plastic-lined containment berms
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial

9. Other Information

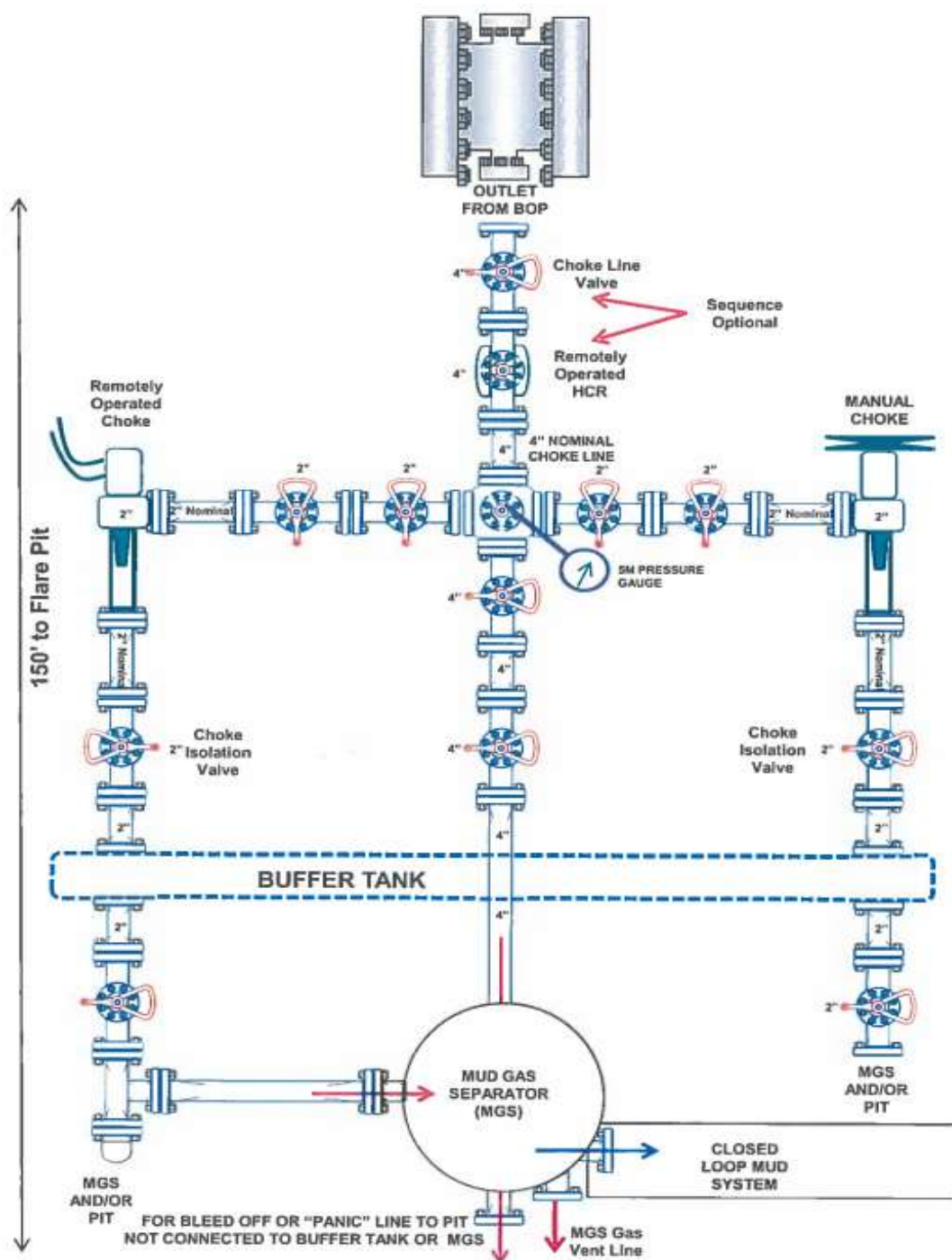
Well Plan and AC Report: attached
Batching Drilling Procedure: attached
WBD: attached
Flex Hose Specs: attached
Offline Cementing Procedure Attached:



10,000 BOP Schematic



10M Choke Manifold Equipment (With MGS + Closed Loop)





ContiTech

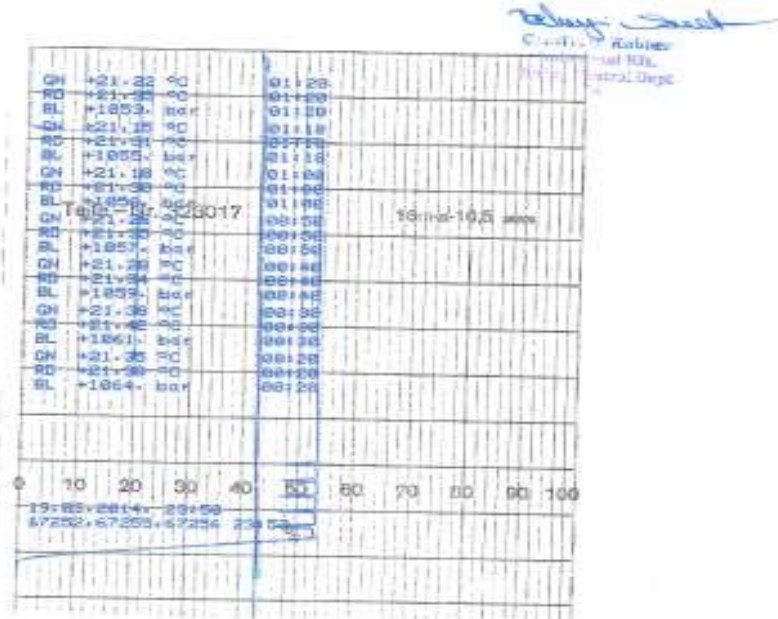
CONTITECH RUBBER Industrial Kft.	No:QC-DB- 210/ 2014 Page: 9 / 113
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QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°: 504	
PURCHASER: ContiTech Oil & Marine Corp.				P.O. N°: 4500408659	
CONTITECH RUBBER order N°: 538236		HOSE TYPE: 3" ID		Choke and Kill Hose	
HOSE SERIAL N°: 67255		NOMINAL / ACTUAL LENGTH:		10,67 m / 10,77 m	
W.P.: 68,9 MPa 10000 psi		T.P.: 103,4 MPa 15000 psi		Duration: 60 min.	
Pressure test with water at ambient temperature					
See attachment. (1 page)					
↑ 10 mm = 10 Min. → 10 mm = 20 MPa					
COUPLINGS Type		Serial N°		Quality	
3" coupling with		9251 9254		AISI 4130	
4 1/16" 10K API b.w. Flange end				AISI 4130	
				A0579N	
				035608	
Not Designed For Well Testing				API Spec 16 C	
				Temperature rate: "B"	
All metal parts are flawless					
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.					
STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated, inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.					
COUNTRY OF ORIGIN HUNGARY/EU					
Date:		Inspector		Quality Control	
20. March 2014.				ContiTech Rubber Industrial S.R.L. Quality Control Dept.  	

Centech Rubber Industrial Co., Ltd. (Subsidiary of 10, H-8728 Sangon) H-6701 P.O. Box 102 Sangon, Hangzhou
Phone: +86 571 864 737 / Fax: +86 52 566 728 / e-mail: info@hdc.coasttech.hk / Internet: www.centech-rubber.hk / www.coasttech.hk
The Court of Chancery County or Registry Court / Registry Court No: Cg 99-09-000503 / EU 197 No: H11153709
Hans Data Communications Zrt., Budapest: H-102106-26830000

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE No: 501, 504, 505

Page: 1 / 1





CONTITECH RUBBER
Industrial Kft.

No:QC-DB- 210/ 2014

Page: 15 / 113

ContiTech

Hose Data Sheet

CRI Order No.	538236
Customer	ContiTech Oil & Marine Corp.
Customer Order No.	4500409659
Item No.	1
Hose Type	Flexible Hose
Standard	API SPEC 16 C
Inside dia in inches	3
Length	35 ft
Type of coupling one end	FLANGE 4.1/16" 10K API SPEC 6A TYPE 6BX FLANGE C/W BX155 R.GR.SOUR
Type of coupling other end	FLANGE 4.1/16" 10K API SPEC 6A TYPE 6BX FLANGE C/W BX155 R.GR.SOUR
H2S service NACE MR0175	Yes
Working Pressure	10 000 psi
Design Pressure	10 000 psi
Test Pressure	15 000 psi
Safety Factor	2,25
Marking	USUAL PHOENIX
Cover	NOT FIRE RESISTANT
Outside protection	St. steel outer wrap
Internal stripwound tube	No
Lining	OIL + GAS RESISTANT SOUR
Safety clamp	No
Lifting collar	No
Element C	No
Safety chain	No
Safety wire rope	No
Max. design temperature [°C]	100
Min. design temperature [°C]	-20
Min. Bend Radius operating [m]	0,90
Min. Bend Radius storage [m]	0,90
Electrical continuity	The Hose is electrically continuous
Type of packing	WOODEN CRATE ISPM-15

Printed: TIRETECHZICsontosG - 2014.03.10 15:22:17



DRAWN	DLE	26OCT23
APPRV		
DRAWING NO. HBE0001074		

Permian Resources Casing Design Criteria

A sundry will be requested if any lesser grade or different size casing is substituted. All casing will be centralized as specified in Onshore Order II. Casing will be tested as specified in Onshore Order II.

Casing Design Assumptions:

Surface

- 1) Burst Design Loads
 - a. Displacement to Gas
 - i. Internal: Assumes a full column of gas in the casing with a gas gradient of 0.7 psi/ft in the absence of better information. It is limited to the controlling pressure based on the maximum expected pore pressure within the next drilling interval.
 - ii. External: Mud weight to TOC and cement mix water gradient (8.4 ppg) below TOC.
 - b. Casing Pressure Test
 - i. Internal: Displacement fluid plus surface pressure required to comply with regulatory casing test pressure requirements of Onshore Oil and Gas Order II and NM NMAC 19.15.16 of NMOCD regulations.
 - ii. External: Mud weight to TOC and cement mix water (8.4 ppg) below TOC.
- 2) Collapse Loads
 - a. Cementing
 - i. Internal: Displacement fluid density.
 - ii. External: Mud weight from TOC to surface and cement slurry weight from TOC to shoe.
 - b. Lost Returns with Mud Drop
 - i. Internal: Lost circulation at the TD of the next hole section and the fluid level falls to a depth where the hydrostatic pressure of the mud column equals pore pressure at the depth of the lost circulation zone.
 - ii. External: Mud weight to TOC and cement slurry(s) density below TOC
- 3) Tension Loads
 - a. Overpull Force
 - i. Axial: Dry weight of the string plus 100,000 lbs applied in a stuck pipe situation.
 - b. Green Cement Casing Test
 - i. Axial: Buoyant weight of the string plus cement plug bump pressure load.

Intermediate I

- 1) Burst Design Loads
 - a. Displacement to Gas
 - i. Internal: Assumes a full column of gas in the casing with a gas gradient of 0.7 psi/ft in the absence of better information. It is limited to the controlling pressure based on the maximum expected pore pressure within the next drilling interval.
 - ii. External: Mud weight to TOC and cement mix water gradient (8.4 ppg) below TOC.
 - b. Casing Pressure Test
 - i. Internal: Displacement fluid plus surface pressure required to comply with regulatory casing test pressure requirements of Onshore Oil and Gas Order II and NM NMAC 19.15.16 of NMOCD regulations.
 - ii. External: Mud weight to TOC and cement mix water (8.4 ppg) below TOC.
- 2) Collapse Loads
 - a. Cementing

- i. Internal: Displacement fluid density.
 - ii. External: Mud weight from TOC to surface and cement slurry weight from TOC to shoe.
 - b. Lost Returns with Mud Drop
 - i. Internal: Lost circulation at the TD of the next hole section and the fluid level falls to a depth where the hydrostatic pressure of the mud column equals pore pressure at the depth of the lost circulation zone.
 - ii. External: Mud weight to TOC and cement slurry(s) density below TOC
- 3) Tension Loads
 - a. Overpull Force
 - i. Axial: Dry weight of the string plus 50,000 lbs applied in a stuck pipe situation.
 - b. Green Cement Casing Test
 - i. Axial: Buoyant weight of the string plus cement plug bump pressure load.

Intermediate or Intermediate II

- 1) Burst Design Loads
 - a. Gas Kick Profile
 - i. Internal: Load profile based on influx encountered in lateral portion of wellbore with a maximum influx volume of 150 bbls and a kick intensity of 1.5 ppg using maximum anticipated MW of 9.9 ppg.
 - ii. External: Mud weight to TOC and cement mix water gradient (8.4 ppg) below TOC.
 - b. Casing Pressure Test
 - i. Internal: Displacement fluid plus surface pressure required to comply with regulatory casing test pressure requirements of Onshore Oil and Gas Order II and NM NMAC 19.15.16 of NMOCD regulations.
 - ii. External: Mud weight to TOC and cement mix water (8.4 ppg) below TOC.
- 2) Collapse Loads
 - a. Cementing
 - i. Internal: Displacement fluid density.
 - ii. External: Mud weight from TOC to surface and cement slurry weight from TOC to shoe.
 - b. Lost Returns with Mud Drop
 - i. Internal: Lost circulation at the deepest TVD of the next hole section and the fluid level falls to a depth where the hydrostatic pressure of the mud column equals pore pressure at the depth of the lost circulation zone.
 - ii. External: Mud weight to TOC and cement slurry(s) density below TOC
- 3) Tension Loads
 - a. Overpull Force
 - i. Axial: Dry weight of the string plus 50,000 lbs applied in a stuck pipe situation.
 - b. Green Cement Casing Test
 - i. Axial: Buoyant weight of the string plus cement plug bump pressure load.

Production

- 1) Burst Design Loads
 - a. Injection Down Casing
 - i. Internal: Surface pressure plus injection fluid gradient
 - ii. External: Mud base-fluid density to top of cement and cement mix water gradient (8.4 ppg) below TOC.
 - b. Casing Pressure Test (Drilling)

- i. Internal: Displacement fluid plus surface pressure required to comply with regulatory casing test pressure requirements of Onshore Oil and Gas Order II and NM NMAC 19.15.16 of NMOCD regulations.
 - ii. External: Mud weight to TOC and cement mix water (8.4 ppg) below TOC.
 - c. Casing Pressure Test (Production)
 - i. Internal: The design pressure test should be the greater of the planned test pressure prior to stimulation down the casing, the regulatory test pressure, and the expected gas lift system pressure. The design test fluid should be the fluid associated with the pressure test having the greatest pressure.
 - ii. External: Mud base-fluid density to top of cement and cement mix water gradient (8.4 ppg) below TOC.
 - d. Tubing Leak
 - i. Internal: SITP plus a packer fluid gradient to the top of packer.
 - ii. External: Mud base-fluid density to top of cement and cement mix water gradient (8.4 ppg) below TOC.
- 2) Collapse Loads
 - a. Cementing
 - i. Internal: Displacement fluid density.
 - ii. External: Mud weight from TOC to surface and cement slurry weight from TOC to shoe.
 - b. Full Evacuation
 - i. Internal: Fully void pipe.
 - ii. External: Mud weight to TOC and cement slurry(s) density below TOC
- 3) Tension Loads
 - a. Overpull Force
 - i. Axial: Dry weight of the string plus 50,000 lbs applied in a stuck pipe situation.
 - b. Green Cement Casing Test
 - i. Axial: Buoyant weight of the string plus cement plug bump pressure load.

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.

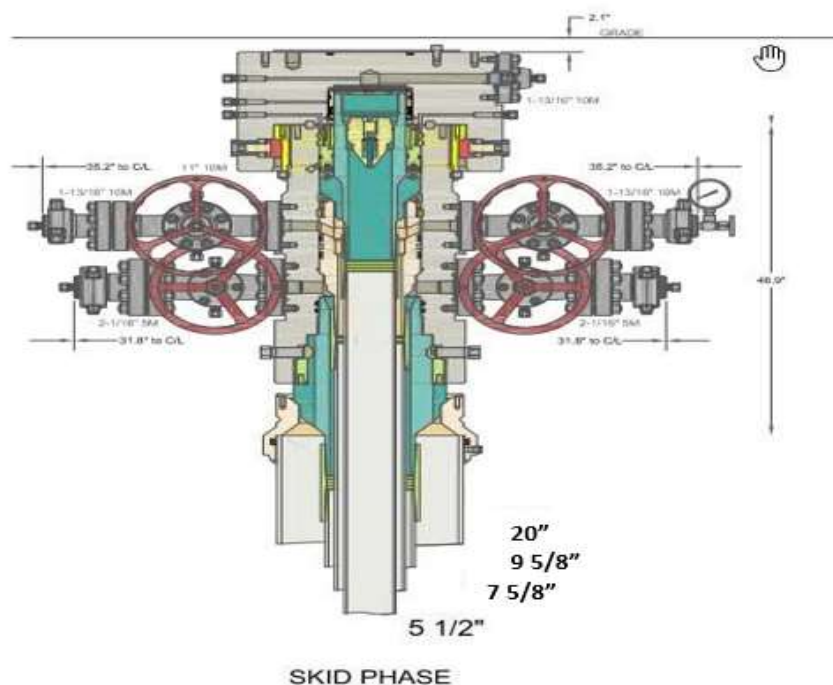


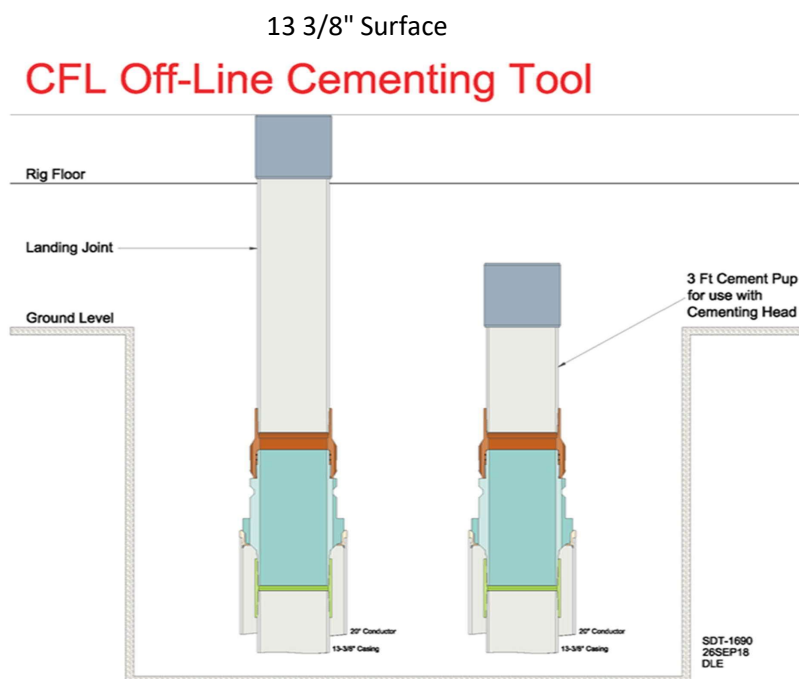
Illustration 2-2

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.

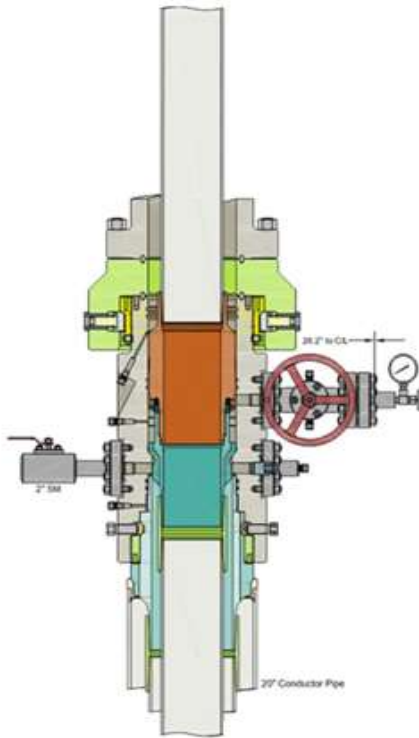
1. Drilling Rig will remove the nightcap and install and test BOPE.
2. Install wear bushing then drill Intermediate shoe-track plus 20' and conduct FIT to minimum MW equivalent to control the formation pressure to TD of well.
3. Drill Vertical hole to KOP – Trip out for Curve BHA.
4. Drill Curve, landing 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.

Permian Resources Offline Cementing Procedure Surface & Intermediate Casing

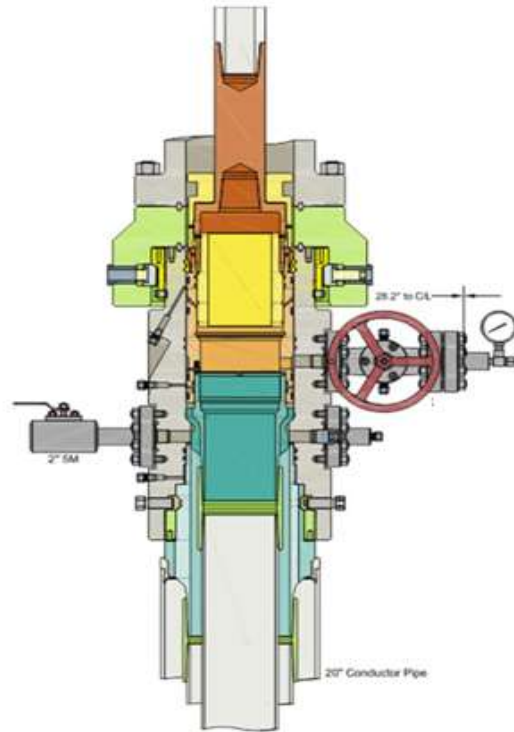
1. Drill hole to Total Depth with Rig and perform wellbore cleanup cycles.
2. Run and casing to Depth.
3. Land casing with mandrel.
4. Circulate 1.5 csg capacity.
5. Flow test – Confirm well is static and floats are holding.
6. Set Annular packoff and pressure test. Test to 5k.
7. Nipple down BOP and 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.



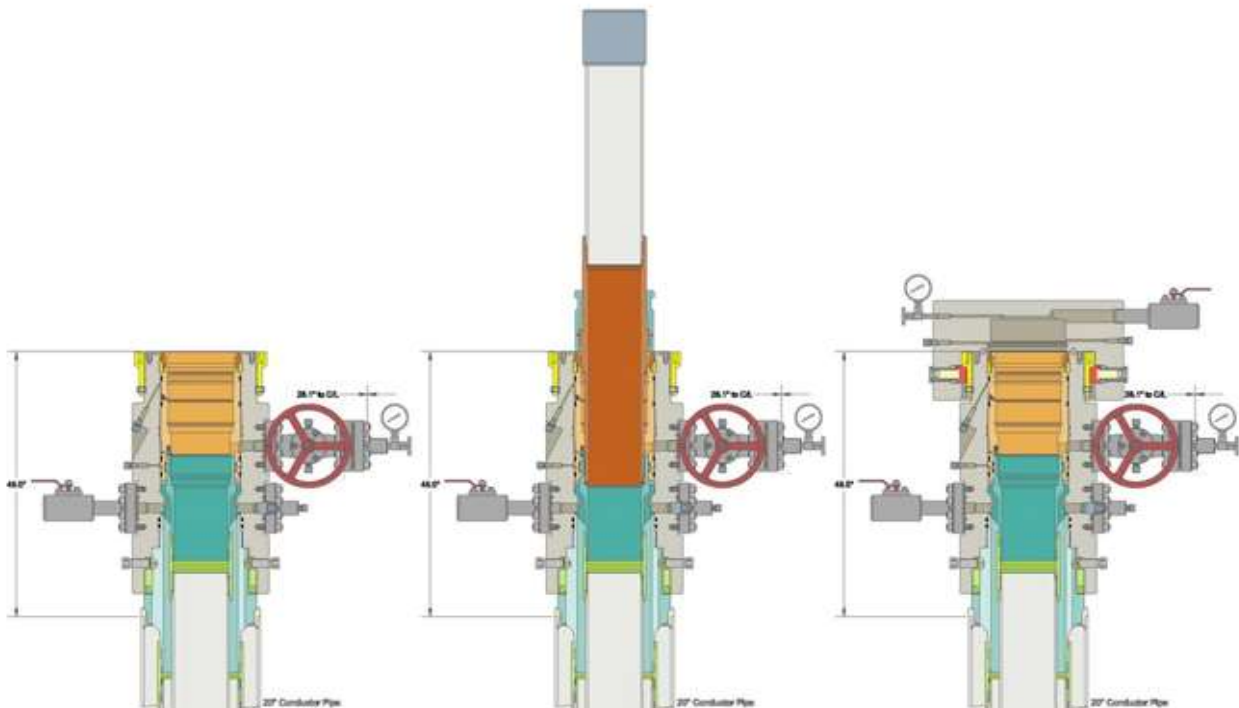
Intermediate



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





Metal One Corp.

Metal One

MO-FXL

*1 Pipe Body: BMP P110HSCY MinYS125ksi
Min95%WT

CDS#

Date

MO-FXL 7-5/8 29.7

P110HSCY

MinYS125ksi

Min95%WT

20-Sep-23

Connection Data Sheet

MO-FXL

Geometry

Imperial

S.I.

Pipe Body

Grade *

P110HSCY

P110HSCY

Pipe OD (D)

7 5/8

in

193.68

mm

Weight

29.70

lb/ft

44.25

kg/m

Actual weight

29.04

lb/ft

43.26

kg/m

Wall Thickness (t)

0.375

in

9.53

mm

Pipe ID (d)

6.875

in

174.63

mm

Pipe body cross section

8.541

in²

5,510

mm²

Drift Dia.

6.750

in

171.45

mm

Connection

Box OD (W)

7.625

in

193.68

mm

PIN ID

6.875

in

174.63

mm

Make up Loss

4.219

in

107.16

mm

Box Critical Area

5.714

in²

3686

mm²

Joint load efficiency

70

%

70

%

Thread Taper

1 / 10 (1.2" per ft)

Number of Threads

5 TPI

Performance

Performance Properties for Pipe Body

S.M.Y.S. *1

1,068

kips

4,749

kN

M.I.Y.P. *1

11,680

psi

80.55

MPa

Collapse Strength *1

7,200

psi

49.66

MPa

Note

S.M.Y.S. = Specified Minimum YIELD Strength of Pipe body

M.I.Y.P. = Minimum Internal Yield Pressure of Pipe body

* BMP P110HSCY: MinYS125ksi, Min95%WT, Collapse Strength 7,200psi

Performance Data Sheet: 7.625" 29.7lb/ft P110HSCY Rev3, dated 9/19/2023

Performance Properties for Connection

Tensile Yield load

747

kips

70% of S.M.Y.S.)

Min.Compression Yield

747

kips

(70% of S.M.Y.S.)

Internal Pressure

9,340

psi

(80% of M.I.Y.P.)

External Pressure

100% of Collapse Strength

Max. DLS (deg./100ft)

30

Recommended Torque

Min.

15,500

ft-lb

21,000

N-m

Opti.

17,200

ft-lb

23,300

N-m

Max.

18,900

ft-lb

25,600

N-m

Operational Max.

23,600

ft-lb

32,000

N-m

Note : Operational Max. torque can be applied for high torque application

Box critical area

d

D

Pin critical area


Make up loss

Legal Notice

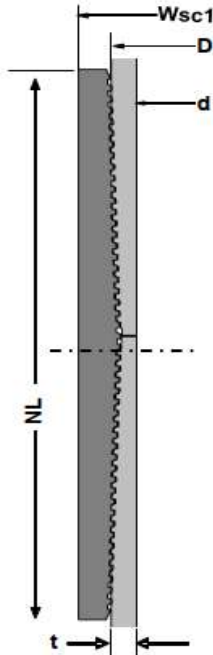
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The products described in this Connection Data Sheet are not recommended for use in deep water offshore applications. For more information, please refer to http://www.mfco.co.jp/mo-con/images/ftp/WebsiteTerms_Active_20230207_1.pdf the contents of which are incorporated by reference into this Connection Data Sheet.

Metal One Corp. 	GEOCONN-SC Pipe Body: SeAH P110RY(SMYS110ksi) & 95%RBW *1 Coupling: P110CY (SMYS110ksi) Connection Data Sheet	Page Date Rev.	MAI GC 5.5 20 SeAH PRY 95%RW SC-CpigOD 6.050 P110CY 29-Sep-21 0
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GEOCONN-SC



Geometry

Imperial

S.I.

Pipe Body				
Grade *1	SeAH P110RY	-	SeAH P110RY	
SMYS	110	ksi	110	ksi
Pipe OD (D)	5.500	in	139.70	mm
Weight	20.00	lb/ft	29.80	kg/m
Wall Thickness (t)	0.361	in	9.17	mm
Pipe ID (d)	4.778	in	121.36	mm
Drift Dia.	4.653	in	118.19	mm

Connection				
Coupling SMYS	110	ksi	110	ksi
Coupling OD (Wsc1)	6.050	in	153.67	mm
Coupling Length (NL)	8.350	in	212.09	mm
Make up Loss	4.125	in	104.78	mm
Pipe Critical Area	5.83	in ²	3,760	mm ²
Box Critical Area	6.00	in ²	3,874	mm ²
Thread Taper	1 / 16 (3/4" per ft)			
Number of Threads	5 TPI			

Performance

Imperial

S.I.

Performance Properties for Pipe Body				
S.M.Y.S.	641	kips	2,852	kN
M.I.Y.P. *1	13,720	psi	94.62	MPa
Collapse Strength	11,100	psi	76.55	MPa

Note S.M.Y.S.= Specified Minimum YIELD Strength of Pipe body
 M.I.Y.P. = Minimum Internal Yield Pressure of Pipe body
 *1 Pipe: SeAH P110RY (SMYS110ksi), Min Wall Thickness of Pipe Body: 95% of Nom wall

Performance Properties for Connection	
Min. Connection Joint Strength	100% of S.M.Y.S.
Min. Compression Yield	100% of S.M.Y.S.
Internal Pressure	100% of M.I.Y.P.
External Pressure	100% of Collapse Strength
Max. DLS (deg. /100ft)	>90

Recommended Torque				
Min.	14,600	ft-lb	19,700	N-m
Opti.	16,200	ft-lb	21,900	N-m
Max.	17,800	ft-lb	24,100	N-m
Operational Max.	19,500	ft-lb	26,400	N-m

Note : Operational Max. torque can be applied for high torque application

Legal Notice

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5.5" 20# .361" P-110 Restricted Yield (RY)

Dimensions (Nominal)

Outside Diameter	5.500	in.
Wall	0.361	in.
Inside Diameter	4.778	in.
Drift	4.653	in.
Weight, T&C	20.000	lbs/ft
Weight, PE	19.830	lbs/ft

Performance Properties (Minimum)

Minimum Yield Strength	110000	psi
Maximum Yield Strength	125000	psi
Collapse, PE	11100	psi
Internal Yield Pressure		
PE	12630	psi
LTC	12360	psi
BTC	12360	psi
Yield Strength, Pipe Body	641	1000 lbs
Joint Strength		
LTC	548	1000 lbs
BTC	667	1000 lbs

Note: SeAH Steel has produced this specification sheet for general information only. SeAH does not assume liability or responsibility for any loss or injury resulting from the use of information or data contained herein. All applications for the material described are at the customer's own risk and responsibility.



5.500 x 20.00# P-110 RY Bushmaster® SL (95% RBW)

Pipe Body Data		
Nominal OD	5.500	Inches
Wall Thickness	0.361	Inches
Weight	20.00	lb/ft
PE Weight	19.83	lb/ft
Nominal ID	4.778	Inches
Drift	4.653	Inches
Minimum Yield Strength	110,000	PSI
Minimum Tensile Strength	125,000	PSI
RBW	95.0%	Rating

Connection Data		
Connection OD	5.900	Inches
Connection ID	4.778	Inches
Make-Up Loss	4.892	Inches
Tension Efficiency	100%	Rating
Compression Efficiency	100%	Rating
Yield Strength in Tension	641,000	LBS.
Yield Strength in Compression	641,000	LBS.
MIYP (Burst)	13,720	PSI
Collapse*	11,110	PSI
Uniaxial Bending	92	°/100 FT

Make-Up Torque		
Yield Torque	41,000	FT-LBS.
Max Operating Torque	32,800	FT-LBS.
Max Make-Up	22,000	FT-LBS.
Optimum Make-Up	20,000	FT-LBS.
Minimum Make-Up	18,000	FT-LBS.



For Technical Support please email support@fermata-tech.com or call (281) 941-5257. 9/21/2023

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*Collapse value based on API collapse +10-15% depending on D/t ratio and is used for example only. The actual collapse rating is 100% of pipe body and will vary depending on the mill. Verify the collapse rating of the pipe body with the manufacturer.

NEW MEXICO

(SP) LEA

EL CAMPEON FED COM PROJECT

EL CAMPEON FED COM 301H

OWB

PWP0

Anticollision Report

13 December, 2023

Permian Resources
Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference	PWP0		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 800.0usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	12/13/2023		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	20,042.7	PWP0 (OWB)	MWD	OWSG_Rev2_ MWD - Standard	

Summary						
Site Name Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation	Warning
	Measured Depth (usft)	Measured Depth (usft)	Between Centres (usft)	Between Ellipses (usft)		
EL CAMPEON FED COM PROJECT						
EL CAMPEON FED COM 401H - OWB - PWP0	2,000.0	1,998.5	90.0	75.9	6.375	CC, ES
EL CAMPEON FED COM 401H - OWB - PWP0	2,100.0	2,096.7	91.9	77.1	6.209	SF
EL CAMPEON FED COM 431H - OWB - PWP0	2,000.0	1,998.0	30.0	15.9	2.125	CC, ES
EL CAMPEON FED COM 431H - OWB - PWP0	2,100.0	2,097.9	31.0	16.2	2.097	SF
EL CAMPEON FED COM 511H - OWB - PWP0	2,000.0	1,998.0	60.0	45.9	4.250	CC, ES
EL CAMPEON FED COM 511H - OWB - PWP0	2,100.0	2,097.1	61.7	46.9	4.168	SF

Offset Design:EL CAMPEON FED COM PROJECT - EL CAMPEON FED COM 401H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program:		0-MWD						Rule Assigned:				Offset Well Error:	0.0 usft	
Reference	Offset	Semi Major Axis		Highside		Offset Wellbore Centre		Distance		Rule Assigned:		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-90.46	-0.7	-90.0	90.0					
100.0	100.0	98.5	98.5	0.3	0.2	-90.46	-0.7	-90.0	90.0	89.5	0.50	180.694		
200.0	200.0	198.5	198.5	0.6	0.6	-90.46	-0.7	-90.0	90.0	88.8	1.21	74.173		
300.0	300.0	298.5	298.5	1.0	1.0	-90.46	-0.7	-90.0	90.0	88.1	1.93	46.625		
400.0	400.0	398.5	398.5	1.3	1.3	-90.46	-0.7	-90.0	90.0	87.4	2.65	33.998		
500.0	500.0	498.5	498.5	1.7	1.7	-90.46	-0.7	-90.0	90.0	86.6	3.36	26.753		
600.0	600.0	598.5	598.5	2.0	2.0	-90.46	-0.7	-90.0	90.0	85.9	4.08	22.053		
700.0	700.0	698.5	698.5	2.4	2.4	-90.46	-0.7	-90.0	90.0	85.2	4.80	18.758		
800.0	800.0	798.5	798.5	2.8	2.8	-90.46	-0.7	-90.0	90.0	84.5	5.52	16.319		
900.0	900.0	898.5	898.5	3.1	3.1	-90.46	-0.7	-90.0	90.0	83.8	6.23	14.442		
1,000.0	1,000.0	998.5	998.5	3.5	3.5	-90.46	-0.7	-90.0	90.0	83.1	6.95	12.952		
1,100.0	1,100.0	1,098.5	1,098.5	3.8	3.8	-90.46	-0.7	-90.0	90.0	82.3	7.67	11.741		
1,200.0	1,200.0	1,198.5	1,198.5	4.2	4.2	-90.46	-0.7	-90.0	90.0	81.6	8.38	10.737		
1,300.0	1,300.0	1,298.5	1,298.5	4.6	4.5	-90.46	-0.7	-90.0	90.0	80.9	9.10	9.891		
1,400.0	1,400.0	1,398.5	1,398.5	4.9	4.9	-90.46	-0.7	-90.0	90.0	80.2	9.82	9.168		
1,500.0	1,500.0	1,498.5	1,498.5	5.3	5.3	-90.46	-0.7	-90.0	90.0	79.5	10.53	8.544		
1,600.0	1,600.0	1,598.5	1,598.5	5.6	5.6	-90.46	-0.7	-90.0	90.0	78.8	11.25	8.000		
1,700.0	1,700.0	1,698.5	1,698.5	6.0	6.0	-90.46	-0.7	-90.0	90.0	78.0	11.97	7.521		
1,800.0	1,800.0	1,798.5	1,798.5	6.3	6.3	-90.46	-0.7	-90.0	90.0	77.3	12.68	7.095		
1,900.0	1,900.0	1,898.5	1,898.5	6.7	6.7	-90.46	-0.7	-90.0	90.0	76.6	13.40	6.716		
2,000.0	2,000.0	1,998.5	1,998.5	7.1	7.1	-90.46	-0.7	-90.0	90.0	75.9	14.12	6.375	CC, ES	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Permian Resources

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED COM 401H - OWB - PWP0

Offset Site Error: 0.0 usft

Survey Program: 0-MWD

Offset Well Error: 0.0 usft

Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)			
2,100.0	2,100.0	2,096.7	2,096.7	7.4	7.4	121.56	-2.1	-90.9	91.9	77.1	14.79	6.209 SF	
2,200.0	2,199.8	2,194.8	2,194.6	7.7	7.7	121.62	-6.2	-93.7	97.5	82.0	15.43	6.316	
2,300.0	2,299.5	2,292.4	2,291.9	8.1	8.0	121.68	-13.1	-98.4	106.8	90.8	16.07	6.647	
2,400.0	2,398.7	2,389.4	2,388.2	8.4	8.4	121.71	-22.6	-104.8	119.9	103.2	16.71	7.174	
2,500.0	2,497.5	2,485.6	2,483.2	8.7	8.7	121.71	-34.7	-113.0	136.7	119.3	17.36	7.872	
2,600.0	2,595.6	2,583.2	2,579.4	9.1	9.0	122.04	-48.7	-122.5	156.4	138.4	18.04	8.667	
2,700.0	2,693.4	2,681.0	2,675.7	9.5	9.4	123.04	-62.8	-132.0	177.1	158.3	18.75	9.445	
2,800.0	2,791.3	2,778.8	2,772.0	9.9	9.8	123.83	-76.9	-141.5	197.8	178.4	19.47	10.162	
2,900.0	2,889.1	2,876.6	2,868.3	10.3	10.1	124.48	-90.9	-151.0	218.6	198.4	20.20	10.823	
3,000.0	2,986.9	2,974.4	2,964.6	10.7	10.5	125.01	-105.0	-160.5	239.4	218.4	20.94	11.432	
3,100.0	3,084.7	3,072.1	3,060.9	11.1	10.9	125.45	-119.1	-170.1	260.2	238.5	21.69	11.995	
3,200.0	3,182.5	3,169.9	3,157.2	11.5	11.3	125.83	-133.1	-179.6	281.0	258.6	22.45	12.516	
3,300.0	3,280.3	3,267.7	3,253.5	11.9	11.7	126.16	-147.2	-189.1	301.8	278.6	23.22	12.998	
3,400.0	3,378.1	3,365.5	3,349.8	12.3	12.1	126.44	-161.3	-198.6	322.7	298.7	24.00	13.445	
3,500.0	3,476.0	3,463.3	3,446.2	12.7	12.5	126.69	-175.3	-208.1	343.5	318.7	24.78	13.861	
3,600.0	3,573.8	3,561.1	3,542.5	13.2	12.9	126.91	-189.4	-217.6	364.4	338.8	25.57	14.249	
3,700.0	3,671.6	3,658.9	3,638.8	13.6	13.3	127.11	-203.5	-227.2	385.2	358.8	26.37	14.610	
3,800.0	3,769.4	3,756.7	3,735.1	14.1	13.7	127.29	-217.5	-236.7	406.1	378.9	27.17	14.947	
3,900.0	3,867.2	3,854.5	3,831.4	14.5	14.1	127.45	-231.6	-246.2	426.9	398.9	27.97	15.263	
4,000.0	3,965.0	3,952.3	3,927.7	15.0	14.5	127.59	-245.7	-255.7	447.8	419.0	28.78	15.558	
4,100.0	4,062.8	4,050.1	4,024.0	15.4	14.9	127.72	-259.7	-265.2	468.6	439.1	29.59	15.836	
4,200.0	4,160.7	4,147.9	4,120.3	15.9	15.3	127.85	-273.8	-274.7	489.5	459.1	30.41	16.096	
4,300.0	4,258.5	4,245.7	4,216.6	16.3	15.7	127.96	-287.8	-284.2	510.4	479.2	31.23	16.342	
4,400.0	4,356.3	4,343.5	4,312.9	16.8	16.1	128.06	-301.9	-293.8	531.3	499.2	32.06	16.573	
4,467.8	4,422.6	4,409.8	4,378.2	17.1	16.4	128.12	-311.5	-300.2	545.4	512.8	32.62	16.723	
4,500.0	4,454.1	4,441.3	4,409.3	17.2	16.6	128.24	-316.0	-303.3	552.0	519.1	32.88	16.788	
4,600.0	4,552.5	4,539.4	4,505.9	17.7	17.0	128.41	-330.1	-312.8	571.1	537.4	33.70	16.948	
4,700.0	4,651.4	4,637.9	4,602.9	18.1	17.4	128.28	-344.3	-322.4	588.2	553.7	34.51	17.044	
4,800.0	4,750.8	4,736.5	4,700.0	18.5	17.8	127.87	-358.4	-332.0	603.1	567.8	35.31	17.082	
4,900.0	4,850.5	4,835.3	4,797.2	18.9	18.3	127.20	-372.6	-341.6	616.0	579.9	36.09	17.070	
5,000.0	4,950.4	4,933.9	4,894.4	19.2	18.7	126.29	-386.8	-351.2	627.0	590.2	36.85	17.015	
5,067.8	5,018.3	5,000.8	4,960.3	19.4	19.0	-86.44	-396.5	-357.7	633.5	596.1	37.36	16.958	
5,100.0	5,050.4	5,032.5	4,991.5	19.5	19.1	-86.87	-401.0	-360.8	636.4	598.8	37.59	16.928	
5,200.0	5,150.4	5,142.0	5,099.5	19.8	19.6	-88.22	-415.6	-370.7	644.9	606.5	38.41	16.791	
5,300.0	5,250.4	5,255.2	5,211.9	20.2	20.0	-89.25	-427.1	-378.4	651.6	612.3	39.22	16.614	
5,400.0	5,350.4	5,369.3	5,325.6	20.5	20.5	-89.94	-435.0	-383.8	656.2	616.2	40.00	16.406	
5,500.0	5,450.4	5,484.1	5,440.2	20.8	20.9	-90.30	-439.1	-386.6	658.6	617.9	40.74	16.166	
5,600.0	5,550.4	5,592.8	5,548.9	21.1	21.2	-90.36	-439.7	-387.0	659.0	617.6	41.42	15.910	
5,700.0	5,650.4	5,692.8	5,648.9	21.4	21.5	-90.36	-439.7	-387.0	659.0	616.9	42.06	15.667	
5,800.0	5,750.4	5,792.8	5,748.9	21.7	21.9	-90.36	-439.7	-387.0	659.0	616.3	42.71	15.430	
5,900.0	5,850.4	5,892.8	5,848.9	22.1	22.2	-90.36	-439.7	-387.0	659.0	615.7	43.36	15.200	
6,000.0	5,950.4	5,992.8	5,948.9	22.4	22.5	-90.36	-439.7	-387.0	659.0	615.0	44.01	14.975	
6,100.0	6,050.4	6,092.8	6,048.9	22.7	22.8	-90.36	-439.7	-387.0	659.0	614.4	44.66	14.757	
6,200.0	6,150.4	6,192.8	6,148.9	23.0	23.1	-90.36	-439.7	-387.0	659.0	613.7	45.31	14.544	
6,300.0	6,250.4	6,292.8	6,248.9	23.4	23.5	-90.36	-439.7	-387.0	659.0	613.0	45.97	14.337	
6,400.0	6,350.4	6,392.8	6,348.9	23.7	23.8	-90.36	-439.7	-387.0	659.0	612.4	46.62	14.134	
6,500.0	6,450.4	6,492.8	6,448.9	24.0	24.1	-90.36	-439.7	-387.0	659.0	611.7	47.28	13.937	
6,600.0	6,550.4	6,592.8	6,548.9	24.3	24.4	-90.36	-439.7	-387.0	659.0	611.1	47.94	13.745	
6,700.0	6,650.4	6,692.8	6,648.9	24.7	24.7	-90.36	-439.7	-387.0	659.0	610.4	48.61	13.558	
6,800.0	6,750.4	6,792.8	6,748.9	25.0	25.1	-90.36	-439.7	-387.0	659.0	609.7	49.27	13.375	
6,900.0	6,850.4	6,892.8	6,848.9	25.3	25.4	-90.36	-439.7	-387.0	659.0	609.1	49.94	13.197	
7,000.0	6,950.4	6,992.8	6,948.9	25.7	25.7	-90.36	-439.7	-387.0	659.0	608.4	50.60	13.023	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

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COMPASS 5000.17 Build 03

Permian Resources

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED COM 401H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
7,100.0	7,050.4	7,092.8	7,048.9	26.0	26.1	-90.36	-439.7	-387.0	659.0	607.7	51.27	12.853		
7,200.0	7,150.4	7,192.8	7,148.9	26.3	26.4	-90.36	-439.7	-387.0	659.0	607.1	51.94	12.688		
7,300.0	7,250.4	7,292.8	7,248.9	26.7	26.7	-90.36	-439.7	-387.0	659.0	606.4	52.61	12.526		
7,400.0	7,350.4	7,392.8	7,348.9	27.0	27.0	-90.36	-439.7	-387.0	659.0	605.7	53.28	12.368		
7,500.0	7,450.4	7,492.8	7,448.9	27.3	27.4	-90.36	-439.7	-387.0	659.0	605.1	53.96	12.214		
7,600.0	7,550.4	7,592.8	7,548.9	27.7	27.7	-90.36	-439.7	-387.0	659.0	604.4	54.63	12.063		
7,700.0	7,650.4	7,692.8	7,648.9	28.0	28.0	-90.36	-439.7	-387.0	659.0	603.7	55.31	11.916		
7,800.0	7,750.4	7,792.8	7,748.9	28.3	28.4	-90.36	-439.7	-387.0	659.0	603.0	55.98	11.772		
7,900.0	7,850.4	7,892.8	7,848.9	28.7	28.7	-90.36	-439.7	-387.0	659.0	602.4	56.66	11.631		
8,000.0	7,950.4	7,992.8	7,948.9	29.0	29.0	-90.36	-439.7	-387.0	659.0	601.7	57.34	11.494		
8,100.0	8,050.4	8,092.8	8,048.9	29.3	29.4	-90.36	-439.7	-387.0	659.0	601.0	58.02	11.359		
8,200.0	8,150.4	8,192.8	8,148.9	29.7	29.7	-90.36	-439.7	-387.0	659.0	600.3	58.70	11.227		
8,300.0	8,250.4	8,292.8	8,248.9	30.0	30.1	-90.36	-439.7	-387.0	659.0	599.6	59.38	11.099		
8,400.0	8,350.4	8,392.8	8,348.9	30.4	30.4	-90.36	-439.7	-387.0	659.0	599.0	60.06	10.973		
8,500.0	8,450.4	8,492.8	8,448.9	30.7	30.7	-90.36	-439.7	-387.0	659.0	598.3	60.74	10.849		
8,600.0	8,550.4	8,592.8	8,548.9	31.0	31.1	-90.36	-439.7	-387.0	659.0	597.6	61.43	10.729		
8,700.0	8,650.4	8,692.8	8,648.9	31.4	31.4	-90.36	-439.7	-387.0	659.0	596.9	62.11	10.611		
8,800.0	8,750.4	8,792.8	8,748.9	31.7	31.7	-90.36	-439.7	-387.0	659.0	596.2	62.79	10.495		
8,900.0	8,850.4	8,892.8	8,848.9	32.1	32.1	-90.36	-439.7	-387.0	659.0	595.5	63.48	10.381		
9,000.0	8,950.4	8,992.8	8,948.9	32.4	32.4	-90.36	-439.7	-387.0	659.0	594.8	64.17	10.270		
9,100.0	9,050.4	9,092.8	9,048.9	32.8	32.8	-90.36	-439.7	-387.0	659.0	594.2	64.85	10.162		
9,200.0	9,150.4	9,192.8	9,148.9	33.1	33.1	-90.36	-439.7	-387.0	659.0	593.5	65.54	10.055		
9,300.0	9,250.4	9,292.8	9,248.9	33.4	33.4	-90.36	-439.7	-387.0	659.0	592.8	66.23	9.951		
9,400.0	9,350.4	9,392.8	9,348.9	33.8	33.8	-90.36	-439.7	-387.0	659.0	592.1	66.92	9.848		
9,500.0	9,450.4	9,492.8	9,448.9	34.1	34.1	-90.36	-439.7	-387.0	659.0	591.4	67.61	9.748		
9,600.0	9,550.4	9,592.8	9,548.9	34.5	34.5	-90.36	-439.7	-387.0	659.0	590.7	68.30	9.649		
9,700.0	9,650.4	9,692.8	9,648.9	34.8	34.8	-90.36	-439.7	-387.0	659.0	590.0	68.99	9.553		
9,800.0	9,750.4	9,792.8	9,748.9	35.2	35.2	-90.36	-439.7	-387.0	659.0	589.3	69.68	9.458		
9,900.0	9,850.4	9,892.8	9,848.9	35.5	35.5	-90.36	-439.7	-387.0	659.0	588.6	70.37	9.365		
10,000.0	9,950.4	9,992.8	9,948.9	35.8	35.8	-90.36	-439.7	-387.0	659.0	588.0	71.06	9.274		
10,100.0	10,050.4	10,092.8	10,048.9	36.2	36.2	-90.36	-439.7	-387.0	659.0	587.3	71.75	9.184		
10,200.0	10,150.4	10,192.8	10,148.9	36.5	36.5	-90.36	-439.7	-387.0	659.0	586.6	72.45	9.096		
10,300.0	10,250.4	10,292.8	10,248.9	36.9	36.9	-90.36	-439.7	-387.0	659.0	585.9	73.14	9.010		
10,400.0	10,350.4	10,392.8	10,348.9	37.2	37.2	-90.36	-439.7	-387.0	659.0	585.2	73.83	8.925		
10,500.0	10,450.4	10,492.8	10,448.9	37.6	37.6	-90.36	-439.7	-387.0	659.0	584.5	74.53	8.842		
10,600.0	10,550.4	10,592.8	10,548.9	37.9	37.9	-90.36	-439.7	-387.0	659.0	583.8	75.22	8.761		
10,700.0	10,650.4	10,692.8	10,648.9	38.3	38.2	-90.36	-439.7	-387.0	659.0	583.1	75.92	8.680		
10,800.0	10,750.4	10,792.8	10,748.9	38.6	38.6	-90.36	-439.7	-387.0	659.0	582.4	76.61	8.602		
10,900.0	10,850.4	10,892.8	10,848.9	39.0	38.9	-90.36	-439.7	-387.0	659.0	581.7	77.31	8.524		
11,000.0	10,950.4	10,992.8	10,948.9	39.3	39.3	-90.36	-439.7	-387.0	659.0	581.0	78.01	8.448		
11,100.0	11,050.4	11,092.8	11,048.9	39.7	39.6	-90.36	-439.7	-387.0	659.0	580.3	78.70	8.373		
11,200.0	11,150.4	11,192.8	11,148.9	40.0	40.0	-90.36	-439.7	-387.0	659.0	579.6	79.40	8.300		
11,300.0	11,250.4	11,292.8	11,248.9	40.4	40.3	-90.36	-439.7	-387.0	659.0	578.9	80.10	8.228		
11,400.0	11,350.4	11,392.8	11,348.9	40.7	40.7	-90.36	-439.7	-387.0	659.0	578.2	80.80	8.156		
11,500.0	11,450.4	11,492.8	11,448.9	41.0	41.0	-90.36	-439.7	-387.0	659.0	577.5	81.49	8.087		
11,573.1	11,523.5	11,565.8	11,522.0	41.3	41.3	-90.36	-439.7	-387.0	659.0	577.0	82.00	8.036		
11,575.0	11,525.4	11,567.8	11,523.9	41.3	41.3	90.20	-439.7	-387.0	659.0	577.0	82.02	8.035		
11,600.0	11,550.4	11,592.7	11,548.9	41.4	41.4	90.27	-439.7	-387.0	659.0	576.8	82.19	8.018		
11,625.0	11,575.3	11,617.7	11,573.8	41.5	41.4	90.44	-439.7	-387.0	659.0	576.7	82.36	8.001		
11,650.0	11,600.1	11,642.4	11,598.6	41.6	41.5	90.73	-439.7	-387.0	659.1	576.5	82.54	7.985		
11,675.0	11,624.7	11,667.0	11,623.2	41.7	41.6	91.12	-439.7	-387.0	659.1	576.4	82.72	7.968		
11,700.0	11,648.9	11,691.3	11,647.4	41.8	41.7	91.60	-439.7	-387.0	659.3	576.4	82.90	7.953		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Permian Resources

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED COM 401H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Rule Assigned:	Distance	Minimum	Separation	Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)		
11,725.0	11,672.9	11,715.2	11,671.4	41.9	41.8	92.17	-439.7	-387.0	659.5	576.4	83.08	7.938	
11,750.0	11,696.4	11,738.7	11,694.9	42.0	41.9	92.81	-439.7	-387.0	659.9	576.7	83.27	7.925	
11,775.0	11,719.5	11,761.8	11,718.0	42.1	41.9	93.52	-439.7	-387.0	660.5	577.1	83.45	7.915	
11,800.0	11,742.0	11,784.3	11,740.5	42.2	42.0	94.26	-439.7	-387.0	661.3	577.7	83.63	7.908	
11,825.0	11,763.9	11,806.2	11,762.4	42.3	42.1	95.04	-439.7	-387.0	662.4	578.6	83.81	7.904	
11,850.0	11,785.2	11,827.5	11,783.7	42.4	42.2	95.83	-439.7	-387.0	663.9	579.9	83.99	7.905	
11,875.0	11,805.7	11,848.0	11,804.2	42.5	42.2	96.61	-439.7	-387.0	665.8	581.6	84.16	7.911	
11,900.0	11,825.5	11,867.8	11,824.0	42.6	42.3	97.36	-439.7	-387.0	668.1	583.8	84.33	7.922	
11,925.0	11,844.4	11,886.7	11,842.9	42.7	42.4	98.07	-439.7	-387.0	671.0	586.5	84.50	7.941	
11,950.0	11,862.5	11,904.8	11,861.0	42.8	42.4	98.72	-439.7	-387.0	674.5	589.8	84.66	7.966	
11,975.0	11,879.6	11,921.9	11,878.1	42.9	42.5	99.28	-439.7	-387.0	678.6	593.7	84.82	8.000	
12,000.0	11,895.8	11,938.1	11,894.3	43.1	42.6	99.75	-439.7	-387.0	683.4	598.4	84.97	8.043	
12,025.0	11,910.9	11,953.2	11,909.4	43.2	42.6	100.09	-439.7	-387.0	688.9	603.8	85.11	8.094	
12,050.0	11,925.0	11,967.3	11,923.5	43.3	42.7	100.30	-439.7	-387.0	695.2	609.9	85.25	8.155	
12,075.0	11,938.0	11,980.3	11,936.5	43.4	42.7	100.36	-439.7	-387.0	702.3	616.9	85.37	8.226	
12,100.0	11,949.8	11,992.1	11,948.3	43.5	42.7	100.26	-439.7	-387.0	710.2	624.7	85.49	8.308	
12,125.0	11,960.5	12,002.8	11,959.0	43.7	42.8	99.97	-439.7	-387.0	718.9	633.3	85.59	8.400	
12,150.0	11,969.9	12,012.3	11,968.4	43.8	42.8	99.48	-439.7	-387.0	728.5	642.8	85.68	8.502	
12,175.0	11,978.2	12,020.5	11,976.7	43.9	42.8	98.79	-439.7	-387.0	738.9	653.1	85.77	8.615	
12,200.0	11,985.2	12,027.5	11,983.7	44.1	42.9	97.89	-439.7	-387.0	750.0	664.2	85.84	8.738	
12,225.0	11,990.9	12,033.3	11,989.4	44.2	42.9	96.75	-439.7	-387.0	761.9	676.0	85.90	8.870	
12,250.0	11,995.4	12,037.7	11,993.9	44.3	42.9	95.38	-439.7	-387.0	774.6	688.6	85.94	9.013	
12,275.0	11,998.5	12,040.9	11,997.0	44.5	42.9	93.77	-439.7	-387.0	787.9	701.9	85.98	9.164	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Permian Resources

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED COM 431H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.0	0.0	0.0	0.0	0.0	0.0	-90.46	-0.2	-30.0	30.1					
100.0	100.0	98.0	98.0	0.3	0.2	-90.46	-0.2	-30.0	30.0	29.5	0.50	60.383		
200.0	200.0	198.0	198.0	0.6	0.6	-90.46	-0.2	-30.0	30.0	28.8	1.21	24.761		
300.0	300.0	298.0	298.0	1.0	1.0	-90.46	-0.2	-30.0	30.0	28.1	1.93	15.556		
400.0	400.0	398.0	398.0	1.3	1.3	-90.46	-0.2	-30.0	30.0	27.4	2.65	11.340		
500.0	500.0	498.0	498.0	1.7	1.7	-90.46	-0.2	-30.0	30.0	26.6	3.36	8.922		
600.0	600.0	598.0	598.0	2.0	2.0	-90.46	-0.2	-30.0	30.0	25.9	4.08	7.354		
700.0	700.0	698.0	698.0	2.4	2.4	-90.46	-0.2	-30.0	30.0	25.2	4.80	6.255		
800.0	800.0	798.0	798.0	2.8	2.8	-90.46	-0.2	-30.0	30.0	24.5	5.51	5.442		
900.0	900.0	898.0	898.0	3.1	3.1	-90.46	-0.2	-30.0	30.0	23.8	6.23	4.815		
1,000.0	1,000.0	998.0	998.0	3.5	3.5	-90.46	-0.2	-30.0	30.0	23.1	6.95	4.318		
1,100.0	1,100.0	1,098.0	1,098.0	3.8	3.8	-90.46	-0.2	-30.0	30.0	22.3	7.66	3.914		
1,200.0	1,200.0	1,198.0	1,198.0	4.2	4.2	-90.46	-0.2	-30.0	30.0	21.6	8.38	3.580		
1,300.0	1,300.0	1,298.0	1,298.0	4.6	4.5	-90.46	-0.2	-30.0	30.0	20.9	9.10	3.298		
1,400.0	1,400.0	1,398.0	1,398.0	4.9	4.9	-90.46	-0.2	-30.0	30.0	20.2	9.81	3.057		
1,500.0	1,500.0	1,498.0	1,498.0	5.3	5.3	-90.46	-0.2	-30.0	30.0	19.5	10.53	2.849		
1,600.0	1,600.0	1,598.0	1,598.0	5.6	5.6	-90.46	-0.2	-30.0	30.0	18.8	11.25	2.667		
1,700.0	1,700.0	1,698.0	1,698.0	6.0	6.0	-90.46	-0.2	-30.0	30.0	18.0	11.97	2.507		
1,800.0	1,800.0	1,798.0	1,798.0	6.3	6.3	-90.46	-0.2	-30.0	30.0	17.3	12.68	2.365		
1,900.0	1,900.0	1,898.0	1,898.0	6.7	6.7	-90.46	-0.2	-30.0	30.0	16.6	13.40	2.239		
2,000.0	2,000.0	1,998.0	1,998.0	7.1	7.1	-90.46	-0.2	-30.0	30.0	15.9	14.12	2.125 CC, ES		
2,100.0	2,100.0	2,097.9	2,097.9	7.4	7.4	121.17	-1.9	-30.1	31.0	16.2	14.80	2.097 SF		
2,200.0	2,199.8	2,197.8	2,197.6	7.7	7.7	120.00	-7.1	-30.4	34.1	18.7	15.45	2.210		
2,300.0	2,299.5	2,297.5	2,297.0	8.1	8.0	118.38	-15.6	-31.0	39.3	23.2	16.10	2.443		
2,400.0	2,398.7	2,397.0	2,395.7	8.4	8.4	116.68	-27.7	-31.7	46.6	29.9	16.77	2.781		
2,500.0	2,497.5	2,496.3	2,493.8	8.7	8.7	115.10	-43.0	-32.6	56.1	38.6	17.45	3.213		
2,600.0	2,595.6	2,595.6	2,591.6	9.1	9.1	115.06	-60.3	-33.7	67.3	49.1	18.15	3.707		
2,700.0	2,693.4	2,694.9	2,689.4	9.5	9.4	116.33	-77.5	-34.8	79.2	60.4	18.87	4.200		
2,800.0	2,791.3	2,794.2	2,787.2	9.9	9.8	117.26	-94.7	-35.8	91.3	71.6	19.60	4.655		
2,900.0	2,889.1	2,893.4	2,884.9	10.3	10.2	117.98	-111.9	-36.9	103.3	82.9	20.35	5.074		
3,000.0	2,986.9	2,992.7	2,982.7	10.7	10.5	118.54	-129.1	-38.0	115.3	94.2	21.12	5.460		
3,100.0	3,084.7	3,092.0	3,080.4	11.1	10.9	119.00	-146.3	-39.0	127.4	105.5	21.89	5.817		
3,200.0	3,182.5	3,191.2	3,178.2	11.5	11.3	119.38	-163.5	-40.1	139.4	116.7	22.68	6.147		
3,300.0	3,280.3	3,290.5	3,276.0	11.9	11.7	119.70	-180.7	-41.1	151.5	128.0	23.47	6.453		
3,400.0	3,378.1	3,389.8	3,373.7	12.3	12.1	119.98	-197.9	-42.2	163.5	139.2	24.27	6.736		
3,500.0	3,476.0	3,489.0	3,471.5	12.7	12.5	120.21	-215.1	-43.3	175.6	150.5	25.08	6.999		
3,600.0	3,573.8	3,588.3	3,569.2	13.2	12.9	120.42	-232.3	-44.3	187.6	161.7	25.90	7.244		
3,700.0	3,671.6	3,687.6	3,667.0	13.6	13.3	120.60	-249.5	-45.4	199.7	173.0	26.73	7.473		
3,800.0	3,769.4	3,786.8	3,764.8	14.1	13.7	120.75	-266.7	-46.4	211.8	184.2	27.55	7.686		
3,900.0	3,867.2	3,886.1	3,862.5	14.5	14.1	120.90	-283.9	-47.5	223.8	195.5	28.39	7.885		
4,000.0	3,965.0	3,985.4	3,960.3	15.0	14.6	121.03	-301.1	-48.6	235.9	206.7	29.23	8.072		
4,100.0	4,062.8	4,084.6	4,058.0	15.4	15.0	121.14	-318.3	-49.6	248.0	217.9	30.07	8.247		
4,200.0	4,160.7	4,183.9	4,155.8	15.9	15.4	121.25	-335.5	-50.7	260.1	229.1	30.92	8.411		
4,300.0	4,258.5	4,283.2	4,253.5	16.3	15.8	121.34	-352.7	-51.8	272.1	240.4	31.77	8.566		
4,400.0	4,356.3	4,382.4	4,351.3	16.8	16.2	121.43	-369.9	-52.8	284.2	251.6	32.62	8.711		
4,467.8	4,422.6	4,449.8	4,417.6	17.1	16.5	121.48	-381.6	-53.5	292.4	259.2	33.21	8.806		
4,500.0	4,454.1	4,481.7	4,449.1	17.2	16.7	121.54	-387.1	-53.9	296.2	262.7	33.48	8.846		
4,600.0	4,552.5	4,581.5	4,547.5	17.7	17.1	121.45	-403.8	-54.9	306.7	272.4	34.33	8.934		
4,700.0	4,651.4	4,681.9	4,646.9	18.1	17.5	121.38	-417.5	-55.8	315.3	280.1	35.15	8.969		
4,800.0	4,750.8	4,782.4	4,746.9	18.5	17.9	121.38	-427.6	-56.4	321.8	285.8	35.94	8.954		
4,900.0	4,850.5	4,883.1	4,847.4	18.9	18.3	121.43	-434.3	-56.8	326.2	289.5	36.68	8.894		
5,000.0	4,950.4	4,983.9	4,948.1	19.2	18.6	121.54	-437.4	-57.0	328.6	291.2	37.37	8.792		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Permian Resources

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED COM 431H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,067.8	5,018.3	5,052.0	5,016.3	19.4	18.8	-90.36	-437.6	-57.0	329.0	291.2	37.82	8.700		
5,100.0	5,050.4	5,084.2	5,048.4	19.5	18.9	-90.36	-437.6	-57.0	329.0	291.0	38.02	8.654		
5,200.0	5,150.4	5,184.2	5,148.4	19.8	19.3	-90.36	-437.6	-57.0	329.0	290.4	38.65	8.511		
5,300.0	5,250.4	5,284.2	5,248.4	20.2	19.6	-90.36	-437.6	-57.0	329.0	289.7	39.29	8.373		
5,400.0	5,350.4	5,384.2	5,348.4	20.5	19.9	-90.36	-437.6	-57.0	329.0	289.1	39.93	8.239		
5,500.0	5,450.4	5,484.2	5,448.4	20.8	20.2	-90.36	-437.6	-57.0	329.0	288.4	40.58	8.108		
5,600.0	5,550.4	5,584.2	5,548.4	21.1	20.5	-90.36	-437.6	-57.0	329.0	287.8	41.22	7.981		
5,700.0	5,650.4	5,684.2	5,648.4	21.4	20.9	-90.36	-437.6	-57.0	329.0	287.1	41.87	7.858		
5,800.0	5,750.4	5,784.2	5,748.4	21.7	21.2	-90.36	-437.6	-57.0	329.0	286.5	42.52	7.738		
5,900.0	5,850.4	5,884.2	5,848.4	22.1	21.5	-90.36	-437.6	-57.0	329.0	285.8	43.17	7.621		
6,000.0	5,950.4	5,984.2	5,948.4	22.4	21.8	-90.36	-437.6	-57.0	329.0	285.2	43.83	7.507		
6,100.0	6,050.4	6,084.2	6,048.4	22.7	22.2	-90.36	-437.6	-57.0	329.0	284.5	44.48	7.396		
6,200.0	6,150.4	6,184.2	6,148.4	23.0	22.5	-90.36	-437.6	-57.0	329.0	283.9	45.14	7.289		
6,300.0	6,250.4	6,284.2	6,248.4	23.4	22.8	-90.36	-437.6	-57.0	329.0	283.2	45.80	7.184		
6,400.0	6,350.4	6,384.2	6,348.4	23.7	23.2	-90.36	-437.6	-57.0	329.0	282.5	46.46	7.081		
6,500.0	6,450.4	6,484.2	6,448.4	24.0	23.5	-90.36	-437.6	-57.0	329.0	281.9	47.12	6.982		
6,600.0	6,550.4	6,584.2	6,548.4	24.3	23.8	-90.36	-437.6	-57.0	329.0	281.2	47.79	6.885		
6,700.0	6,650.4	6,684.2	6,648.4	24.7	24.2	-90.36	-437.6	-57.0	329.0	280.6	48.45	6.790		
6,800.0	6,750.4	6,784.2	6,748.4	25.0	24.5	-90.36	-437.6	-57.0	329.0	279.9	49.12	6.698		
6,900.0	6,850.4	6,884.2	6,848.4	25.3	24.8	-90.36	-437.6	-57.0	329.0	279.2	49.79	6.608		
7,000.0	6,950.4	6,984.2	6,948.4	25.7	25.2	-90.36	-437.6	-57.0	329.0	278.5	50.46	6.520		
7,100.0	7,050.4	7,084.2	7,048.4	26.0	25.5	-90.36	-437.6	-57.0	329.0	277.9	51.13	6.434		
7,200.0	7,150.4	7,184.2	7,148.4	26.3	25.8	-90.36	-437.6	-57.0	329.0	277.2	51.81	6.351		
7,300.0	7,250.4	7,284.2	7,248.4	26.7	26.2	-90.36	-437.6	-57.0	329.0	276.5	52.48	6.269		
7,400.0	7,350.4	7,384.2	7,348.4	27.0	26.5	-90.36	-437.6	-57.0	329.0	275.9	53.15	6.190		
7,500.0	7,450.4	7,484.2	7,448.4	27.3	26.9	-90.36	-437.6	-57.0	329.0	275.2	53.83	6.112		
7,600.0	7,550.4	7,584.2	7,548.4	27.7	27.2	-90.36	-437.6	-57.0	329.0	274.5	54.51	6.036		
7,700.0	7,650.4	7,684.2	7,648.4	28.0	27.5	-90.36	-437.6	-57.0	329.0	273.8	55.19	5.962		
7,800.0	7,750.4	7,784.2	7,748.4	28.3	27.9	-90.36	-437.6	-57.0	329.0	273.1	55.87	5.889		
7,900.0	7,850.4	7,884.2	7,848.4	28.7	28.2	-90.36	-437.6	-57.0	329.0	272.5	56.55	5.818		
8,000.0	7,950.4	7,984.2	7,948.4	29.0	28.6	-90.36	-437.6	-57.0	329.0	271.8	57.23	5.749		
8,100.0	8,050.4	8,084.2	8,048.4	29.3	28.9	-90.36	-437.6	-57.0	329.0	271.1	57.91	5.682		
8,200.0	8,150.4	8,184.2	8,148.4	29.7	29.2	-90.36	-437.6	-57.0	329.0	270.4	58.59	5.615		
8,300.0	8,250.4	8,284.2	8,248.4	30.0	29.6	-90.36	-437.6	-57.0	329.0	269.7	59.27	5.551		
8,400.0	8,350.4	8,384.2	8,348.4	30.4	29.9	-90.36	-437.6	-57.0	329.0	269.0	59.96	5.487		
8,500.0	8,450.4	8,484.2	8,448.4	30.7	30.3	-90.36	-437.6	-57.0	329.0	268.4	60.64	5.425		
8,600.0	8,550.4	8,584.2	8,548.4	31.0	30.6	-90.36	-437.6	-57.0	329.0	267.7	61.33	5.365		
8,700.0	8,650.4	8,684.2	8,648.4	31.4	30.9	-90.36	-437.6	-57.0	329.0	267.0	62.02	5.305		
8,800.0	8,750.4	8,784.2	8,748.4	31.7	31.3	-90.36	-437.6	-57.0	329.0	266.3	62.70	5.247		
8,900.0	8,850.4	8,884.2	8,848.4	32.1	31.6	-90.36	-437.6	-57.0	329.0	265.6	63.39	5.190		
9,000.0	8,950.4	8,984.2	8,948.4	32.4	32.0	-90.36	-437.6	-57.0	329.0	264.9	64.08	5.134		
9,100.0	9,050.4	9,084.2	9,048.4	32.8	32.3	-90.36	-437.6	-57.0	329.0	264.2	64.77	5.080		
9,200.0	9,150.4	9,184.2	9,148.4	33.1	32.7	-90.36	-437.6	-57.0	329.0	263.5	65.46	5.026		
9,300.0	9,250.4	9,284.2	9,248.4	33.4	33.0	-90.36	-437.6	-57.0	329.0	262.9	66.15	4.974		
9,400.0	9,350.4	9,384.2	9,348.4	33.8	33.4	-90.36	-437.6	-57.0	329.0	262.2	66.84	4.922		
9,500.0	9,450.4	9,484.2	9,448.4	34.1	33.7	-90.36	-437.6	-57.0	329.0	261.5	67.53	4.872		
9,600.0	9,550.4	9,584.2	9,548.4	34.5	34.1	-90.36	-437.6	-57.0	329.0	260.8	68.22	4.823		
9,700.0	9,650.4	9,684.2	9,648.4	34.8	34.4	-90.36	-437.6	-57.0	329.0	260.1	68.91	4.774		
9,800.0	9,750.4	9,784.2	9,748.4	35.2	34.7	-90.36	-437.6	-57.0	329.0	259.4	69.61	4.727		
9,900.0	9,850.4	9,884.2	9,848.4	35.5	35.1	-90.36	-437.6	-57.0	329.0	258.7	70.30	4.680		
10,000.0	9,950.4	9,984.2	9,948.4	35.8	35.4	-90.36	-437.6	-57.0	329.0	258.0	70.99	4.634		
10,100.0	10,050.4	10,084.2	10,048.4	36.2	35.8	-90.36	-437.6	-57.0	329.0	257.3	71.69	4.589		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Permian Resources

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED COM 431H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program:	0-MWD												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,200.0	10,150.4	10,184.2	10,148.4	36.5	36.1	-90.36	-437.6	-57.0	329.0	256.6	72.38	4.545		
10,300.0	10,250.4	10,284.2	10,248.4	36.9	36.5	-90.36	-437.6	-57.0	329.0	255.9	73.08	4.502		
10,400.0	10,350.4	10,384.2	10,348.4	37.2	36.8	-90.36	-437.6	-57.0	329.0	255.2	73.77	4.460		
10,500.0	10,450.4	10,484.2	10,448.4	37.6	37.2	-90.36	-437.6	-57.0	329.0	254.5	74.47	4.418		
10,600.0	10,550.4	10,584.2	10,548.4	37.9	37.5	-90.36	-437.6	-57.0	329.0	253.8	75.17	4.377		
10,700.0	10,650.4	10,684.2	10,648.4	38.3	37.9	-90.36	-437.6	-57.0	329.0	253.1	75.86	4.337		
10,800.0	10,750.4	10,784.2	10,748.4	38.6	38.2	-90.36	-437.6	-57.0	329.0	252.4	76.56	4.297		
10,900.0	10,850.4	10,884.2	10,848.4	39.0	38.6	-90.36	-437.6	-57.0	329.0	251.7	77.26	4.259		
11,000.0	10,950.4	10,984.2	10,948.4	39.3	38.9	-90.36	-437.6	-57.0	329.0	251.1	77.96	4.220		
11,100.0	11,050.4	11,084.2	11,048.4	39.7	39.3	-90.36	-437.6	-57.0	329.0	250.4	78.65	4.183		
11,200.0	11,150.4	11,184.2	11,148.4	40.0	39.6	-90.36	-437.6	-57.0	329.0	249.7	79.35	4.146		
11,300.0	11,250.4	11,284.2	11,248.4	40.4	40.0	-90.36	-437.6	-57.0	329.0	249.0	80.05	4.110		
11,400.0	11,350.4	11,384.2	11,348.4	40.7	40.3	-90.36	-437.6	-57.0	329.0	248.3	80.75	4.074		
11,500.0	11,450.4	11,484.2	11,448.4	41.0	40.7	-90.36	-437.6	-57.0	329.0	247.6	81.45	4.039		
11,573.1	11,523.5	11,557.3	11,521.5	41.3	40.9	-90.36	-437.6	-57.0	329.0	247.0	81.96	4.014		
11,575.0	11,525.4	11,559.2	11,523.4	41.3	40.9	90.21	-437.6	-57.0	329.0	247.0	81.97	4.014		
11,600.0	11,550.4	11,584.2	11,548.4	41.4	41.0	90.34	-437.6	-57.0	329.0	246.9	82.15	4.005		
11,625.0	11,575.3	11,609.1	11,573.3	41.5	41.1	90.69	-437.6	-57.0	329.0	246.7	82.32	3.997		
11,650.0	11,600.1	11,633.9	11,598.1	41.6	41.2	91.27	-437.6	-57.0	329.1	246.6	82.49	3.990		
11,675.0	11,624.7	11,658.5	11,622.7	41.7	41.3	92.05	-437.6	-57.0	329.2	246.6	82.66	3.983		
11,700.0	11,648.9	11,682.7	11,646.9	41.8	41.4	93.01	-437.6	-57.0	329.5	246.7	82.82	3.978		
11,725.0	11,672.9	11,706.7	11,670.9	41.9	41.4	94.15	-437.6	-57.0	330.0	247.0	82.99	3.976		
11,750.0	11,696.4	11,730.2	11,694.4	42.0	41.5	95.44	-437.6	-57.0	330.7	247.6	83.15	3.977		
11,775.0	11,719.5	11,753.3	11,717.5	42.1	41.6	96.84	-437.6	-57.0	331.8	248.5	83.30	3.983		
11,800.0	11,742.0	11,775.8	11,740.0	42.2	41.7	98.32	-437.6	-57.0	333.4	250.0	83.46	3.995		
11,825.0	11,763.9	11,797.7	11,761.9	42.3	41.8	99.85	-437.6	-57.0	335.6	252.0	83.60	4.014		
11,850.0	11,785.2	11,819.0	11,783.2	42.4	41.8	101.39	-437.6	-57.0	338.4	254.7	83.74	4.041		
11,875.0	11,805.7	11,839.5	11,803.7	42.5	41.9	102.91	-437.6	-57.0	342.0	258.2	83.87	4.078		
11,900.0	11,825.5	11,859.3	11,823.5	42.6	42.0	104.37	-437.6	-57.0	346.5	262.5	83.99	4.126		
11,925.0	11,844.4	11,878.2	11,842.4	42.7	42.1	105.73	-437.6	-57.0	352.0	267.9	84.10	4.185		
11,950.0	11,862.5	11,896.3	11,860.5	42.8	42.1	106.95	-437.6	-57.0	358.5	274.3	84.20	4.258		
11,975.0	11,879.6	11,913.4	11,877.6	42.9	42.2	108.01	-437.6	-57.0	366.1	281.8	84.29	4.343		
12,000.0	11,895.8	11,929.6	11,893.8	43.1	42.2	108.88	-437.6	-57.0	374.9	290.5	84.37	4.443		
12,025.0	11,910.9	11,944.7	11,908.9	43.2	42.3	109.52	-437.6	-57.0	384.8	300.4	84.45	4.557		
12,050.0	11,925.0	11,958.8	11,923.0	43.3	42.3	109.91	-437.6	-57.0	395.9	311.4	84.51	4.685		
12,075.0	11,938.0	11,971.8	11,936.0	43.4	42.4	110.03	-437.6	-57.0	408.2	323.6	84.56	4.827		
12,100.0	11,949.8	11,983.6	11,947.8	43.5	42.4	109.84	-437.6	-57.0	421.6	337.0	84.60	4.983		
12,125.0	11,960.5	11,994.3	11,958.5	43.7	42.5	109.32	-437.6	-57.0	436.1	351.4	84.64	5.152		
12,150.0	11,969.9	12,003.7	11,967.9	43.8	42.5	108.44	-437.6	-57.0	451.6	366.9	84.67	5.334		
12,175.0	11,978.2	12,012.0	11,976.2	43.9	42.5	107.16	-437.6	-57.0	468.1	383.4	84.69	5.527		
12,200.0	11,985.2	12,019.0	11,983.2	44.1	42.5	105.46	-437.6	-57.0	485.4	400.7	84.70	5.731		
12,225.0	11,990.9	12,024.7	11,988.9	44.2	42.6	103.30	-437.6	-57.0	503.6	418.9	84.70	5.946		
12,250.0	11,995.4	12,029.2	11,993.4	44.3	42.6	100.65	-437.6	-57.0	522.5	437.8	84.70	6.169		
12,275.0	11,998.5	12,032.3	11,996.5	44.5	42.6	97.49	-437.6	-57.0	542.0	457.3	84.69	6.399		
12,300.0	12,000.4	12,034.2	11,998.4	44.6	42.6	93.83	-437.6	-57.0	562.0	477.3	84.67	6.637		
12,323.1	12,001.0	12,034.8	11,999.0	44.7	42.6	90.00	-437.6	-57.0	580.8	496.2	84.65	6.861		
12,400.0	12,001.0	12,034.8	11,999.0	45.1	42.6	90.00	-437.6	-57.0	645.7	561.1	84.59	7.633		
12,500.0	12,001.0	12,034.8	11,999.0	45.7	42.6	90.00	-437.6	-57.0	733.5	649.0	84.53	8.677		
12,600.0	12,001.0	13,307.4	12,721.0	46.4	48.5	155.50	-1,193.2	-49.6	793.4	729.1	64.36	12.328		
12,700.0	12,001.0	13,407.4	12,721.0	47.1	49.1	155.50	-1,293.2	-48.6	793.4	728.5	64.97	12.211		
12,800.0	12,001.0	13,507.4	12,721.0	47.8	49.9	155.50	-1,393.2	-47.6	793.4	727.8	65.64	12.087		
12,900.0	12,001.0	13,607.4	12,721.0	48.6	50.6	155.50	-1,493.2	-46.7	793.4	727.1	66.36	11.956		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Permian Resources

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED COM 431H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
13,000.0	12,001.0	13,707.4	12,721.0	49.4	51.4	155.50	-1,593.2	-45.7	793.4	726.3	67.13	11.819	
13,100.0	12,001.0	13,807.4	12,721.0	50.3	52.3	155.50	-1,693.2	-44.7	793.4	725.5	67.95	11.676	
13,200.0	12,001.0	13,907.4	12,721.0	51.2	53.1	155.50	-1,793.1	-43.7	793.4	724.6	68.82	11.529	
13,300.0	12,001.0	14,007.4	12,721.0	52.2	54.1	155.50	-1,893.1	-42.7	793.4	723.7	69.73	11.378	
13,400.0	12,001.0	14,107.4	12,721.0	53.2	55.0	155.50	-1,993.1	-41.8	793.4	722.7	70.69	11.224	
13,500.0	12,001.0	14,207.4	12,721.0	54.2	56.0	155.50	-2,093.1	-40.8	793.4	721.7	71.69	11.068	
13,600.0	12,001.0	14,307.4	12,721.0	55.2	57.0	155.50	-2,193.1	-39.8	793.4	720.7	72.72	10.910	
13,700.0	12,001.0	14,407.4	12,721.0	56.3	58.1	155.50	-2,293.1	-38.8	793.4	719.6	73.80	10.751	
13,800.0	12,001.0	14,507.4	12,721.0	57.4	59.1	155.50	-2,393.1	-37.8	793.4	718.5	74.91	10.591	
13,900.0	12,001.0	14,607.4	12,721.0	58.5	60.2	155.50	-2,493.1	-36.9	793.4	717.4	76.06	10.431	
14,000.0	12,001.0	14,707.4	12,721.0	59.7	61.3	155.50	-2,593.1	-35.9	793.4	716.2	77.24	10.272	
14,100.0	12,001.0	14,807.4	12,721.0	60.8	62.5	155.50	-2,693.1	-34.9	793.4	715.0	78.46	10.113	
14,200.0	12,001.0	14,907.4	12,721.0	62.0	63.6	155.50	-2,793.1	-33.9	793.4	713.7	79.70	9.955	
14,300.0	12,001.0	15,007.4	12,721.0	63.2	64.8	155.50	-2,893.1	-32.9	793.4	712.5	80.98	9.798	
14,400.0	12,001.0	15,107.4	12,721.0	64.5	66.0	155.50	-2,993.1	-32.0	793.4	711.2	82.28	9.643	
14,500.0	12,001.0	15,207.4	12,721.0	65.7	67.3	155.50	-3,093.1	-31.0	793.4	709.8	83.60	9.490	
14,600.0	12,001.0	15,307.4	12,721.0	67.0	68.5	155.50	-3,193.1	-30.0	793.4	708.5	84.96	9.339	
14,700.0	12,001.0	15,407.4	12,721.0	68.3	69.8	155.50	-3,293.1	-29.0	793.4	707.1	86.33	9.190	
14,800.0	12,001.0	15,507.4	12,721.0	69.6	71.0	155.50	-3,393.1	-28.0	793.4	705.7	87.73	9.044	
14,900.0	12,001.0	15,607.4	12,721.0	70.9	72.3	155.50	-3,493.1	-27.1	793.4	704.3	89.16	8.899	
15,000.0	12,001.0	15,707.4	12,721.0	72.2	73.6	155.50	-3,593.1	-26.1	793.4	702.8	90.60	8.758	
15,100.0	12,001.0	15,807.4	12,721.0	73.6	75.0	155.50	-3,693.1	-25.1	793.4	701.4	92.06	8.618	
15,200.0	12,001.0	15,907.4	12,721.0	74.9	76.3	155.50	-3,793.1	-24.1	793.4	699.9	93.54	8.482	
15,300.0	12,001.0	16,007.4	12,721.0	76.3	77.6	155.50	-3,893.0	-23.1	793.4	698.4	95.04	8.348	
15,400.0	12,001.0	16,107.4	12,721.0	77.6	79.0	155.50	-3,993.0	-22.2	793.4	696.9	96.56	8.217	
15,500.0	12,001.0	16,207.4	12,721.0	79.0	80.4	155.50	-4,093.0	-21.2	793.4	695.3	98.09	8.089	
15,600.0	12,001.0	16,307.4	12,721.0	80.4	81.7	155.50	-4,193.0	-20.2	793.4	693.8	99.64	7.963	
15,700.0	12,001.0	16,407.4	12,721.0	81.8	83.1	155.50	-4,293.0	-19.2	793.4	692.2	101.21	7.840	
15,800.0	12,001.0	16,507.4	12,721.0	83.3	84.5	155.50	-4,393.0	-18.2	793.4	690.6	102.78	7.719	
15,900.0	12,001.0	16,607.4	12,721.0	84.7	85.9	155.50	-4,493.0	-17.3	793.4	689.1	104.38	7.602	
16,000.0	12,001.0	16,707.4	12,721.0	86.1	87.3	155.50	-4,593.0	-16.3	793.4	687.4	105.98	7.487	
16,100.0	12,001.0	16,807.4	12,721.0	87.5	88.8	155.50	-4,693.0	-15.3	793.4	685.8	107.60	7.374	
16,200.0	12,001.0	16,907.4	12,721.0	89.0	90.2	155.50	-4,793.0	-14.3	793.4	684.2	109.23	7.264	
16,300.0	12,001.0	17,007.4	12,721.0	90.4	91.6	155.50	-4,893.0	-13.3	793.4	682.6	110.87	7.157	
16,400.0	12,001.0	17,107.4	12,721.0	91.9	93.1	155.50	-4,993.0	-12.4	793.4	680.9	112.52	7.052	
16,500.0	12,001.0	17,207.4	12,721.0	93.4	94.5	155.50	-5,093.0	-11.4	793.4	679.2	114.18	6.949	
16,600.0	12,001.0	17,307.4	12,721.0	94.8	96.0	155.50	-5,193.0	-10.4	793.4	677.6	115.85	6.849	
16,700.0	12,001.0	17,407.4	12,721.0	96.3	97.4	155.50	-5,293.0	-9.4	793.4	675.9	117.53	6.751	
16,800.0	12,001.0	17,507.4	12,721.0	97.8	98.9	155.50	-5,393.0	-8.4	793.4	674.2	119.22	6.655	
16,900.0	12,001.0	17,607.4	12,721.0	99.3	100.4	155.50	-5,493.0	-7.5	793.4	672.5	120.92	6.561	
17,000.0	12,001.0	17,707.4	12,721.0	100.8	101.9	155.50	-5,593.0	-6.5	793.4	670.8	122.63	6.470	
17,100.0	12,001.0	17,807.4	12,721.0	102.3	103.3	155.50	-5,693.0	-5.5	793.4	669.1	124.34	6.381	
17,200.0	12,001.0	17,907.4	12,721.0	103.8	104.8	155.50	-5,793.0	-4.5	793.4	667.4	126.07	6.294	
17,306.4	12,001.0	18,013.9	12,721.0	105.4	106.4	155.50	-5,899.4	-3.5	793.4	665.5	127.91	6.203	
17,306.8	12,001.0	18,014.3	12,721.0	105.4	106.4	155.50	-5,899.9	-3.5	793.4	665.5	127.92	6.203	
17,400.0	12,001.0	18,107.5	12,721.0	106.8	107.8	155.50	-5,993.0	-2.5	793.4	663.9	129.53	6.125	
17,500.0	12,001.0	18,207.5	12,721.0	108.3	109.3	155.50	-6,093.0	-1.5	793.4	662.1	131.28	6.044	
17,600.0	12,001.0	18,307.5	12,721.0	109.8	110.8	155.50	-6,193.0	-0.5	793.4	660.4	133.03	5.964	
17,700.0	12,001.0	18,407.5	12,721.0	111.4	112.3	155.51	-6,293.0	0.5	793.4	658.6	134.78	5.887	
17,800.0	12,001.0	18,507.5	12,721.0	112.9	113.9	155.51	-6,393.0	1.5	793.4	656.9	136.54	5.811	
17,900.0	12,001.0	18,607.5	12,721.0	114.4	115.4	155.51	-6,493.0	2.5	793.4	655.1	138.31	5.736	
18,000.0	12,001.0	18,707.5	12,721.0	115.9	116.9	155.51	-6,593.0	3.5	793.4	653.3	140.08	5.664	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Permian Resources

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED COM 431H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Rule Assigned:		Distance		Minimum	Separation	Warning		
Measured	Vertical	Measured	Vertical	Reference	Offset	Toolface	+N/-S	+E/-W	Between	Between	Separation	Factor		
Depth	Depth	Depth	Depth	(usft)	(usft)	(°)	(usft)	(usft)	Centres	Ellipses	(usft)			
(usft)	(usft)	(usft)	(usft)						(usft)	(usft)				
18,100.0	12,001.0	18,807.5	12,721.0	117.5	118.4	155.51	-6,693.0	4.5	793.4	651.5	141.86	5.593		
18,200.0	12,001.0	18,907.5	12,721.0	119.0	119.9	155.51	-6,793.0	5.5	793.4	649.7	143.65	5.523		
18,300.0	12,001.0	19,007.5	12,721.0	120.6	121.5	155.51	-6,893.0	6.5	793.4	647.9	145.43	5.455		
18,400.0	12,001.0	19,107.5	12,721.0	122.1	123.0	155.51	-6,993.0	7.5	793.4	646.1	147.23	5.389		
18,500.0	12,001.0	19,207.5	12,721.0	123.6	124.6	155.51	-7,093.0	8.5	793.4	644.3	149.02	5.324		
18,600.0	12,001.0	19,307.5	12,721.0	125.2	126.1	155.51	-7,193.0	9.5	793.4	642.5	150.83	5.260		
18,700.0	12,001.0	19,407.5	12,721.0	126.8	127.6	155.51	-7,293.0	10.5	793.4	640.7	152.63	5.198		
18,800.0	12,001.0	19,507.5	12,721.0	128.3	129.2	155.51	-7,393.0	11.5	793.4	638.9	154.44	5.137		
18,900.0	12,001.0	19,607.5	12,721.0	129.9	130.7	155.51	-7,493.0	12.5	793.3	637.1	156.26	5.077		
19,000.0	12,001.0	19,707.5	12,721.0	131.4	132.3	155.52	-7,593.0	13.5	793.3	635.3	158.08	5.019		
19,100.0	12,001.0	19,807.5	12,721.0	133.0	133.8	155.52	-7,692.9	14.5	793.3	633.4	159.90	4.962		
19,200.0	12,001.0	19,907.5	12,721.0	134.5	135.4	155.52	-7,792.9	15.5	793.3	631.6	161.72	4.906		
19,300.0	12,001.0	20,007.5	12,721.0	136.1	136.9	155.52	-7,892.9	16.5	793.3	629.8	163.55	4.851		
19,400.0	12,001.0	20,107.5	12,721.0	137.7	138.5	155.52	-7,992.9	17.5	793.3	627.9	165.38	4.797		
19,500.0	12,001.0	20,207.5	12,721.0	139.2	140.1	155.52	-8,092.9	18.5	793.3	626.1	167.22	4.744		
19,600.0	12,001.0	20,307.5	12,721.0	140.8	141.6	155.52	-8,192.9	19.5	793.3	624.3	169.06	4.693		
19,700.0	12,001.0	20,407.5	12,721.0	142.4	143.2	155.52	-8,292.9	20.6	793.3	622.4	170.90	4.642		
19,800.0	12,001.0	20,507.5	12,721.0	144.0	144.8	155.52	-8,392.9	21.6	793.3	620.6	172.74	4.592		
19,900.0	12,001.0	20,607.5	12,721.0	145.5	146.3	155.52	-8,492.9	22.6	793.3	618.7	174.59	4.544		
20,000.0	12,001.0	20,707.5	12,721.0	147.1	147.9	155.52	-8,592.9	23.6	793.3	616.9	176.44	4.496		
20,042.7	12,001.0	20,750.2	12,721.0	147.8	148.6	155.52	-8,635.6	24.0	793.3	616.1	177.23	4.476		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Permian Resources

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design:EL CAMPEON FED COM PROJECT - EL CAMPEON FED COM 511H - OWB - PWP0														Offset Site Error:	0.0 usft
Survey Program: Reference		0-MWD		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-90.47	-0.5	-60.0	60.0						
100.0	100.0	98.0	98.0	0.3	0.2	-90.47	-0.5	-60.0	60.0	59.5	0.50	120.767			
200.0	200.0	198.0	198.0	0.6	0.6	-90.47	-0.5	-60.0	60.0	58.8	1.21	49.522			
300.0	300.0	298.0	298.0	1.0	1.0	-90.47	-0.5	-60.0	60.0	58.1	1.93	31.112			
400.0	400.0	398.0	398.0	1.3	1.3	-90.47	-0.5	-60.0	60.0	57.4	2.65	22.681			
500.0	500.0	498.0	498.0	1.7	1.7	-90.47	-0.5	-60.0	60.0	56.6	3.36	17.845			
600.0	600.0	598.0	598.0	2.0	2.0	-90.47	-0.5	-60.0	60.0	55.9	4.08	14.709			
700.0	700.0	698.0	698.0	2.4	2.4	-90.47	-0.5	-60.0	60.0	55.2	4.80	12.510			
800.0	800.0	798.0	798.0	2.8	2.8	-90.47	-0.5	-60.0	60.0	54.5	5.51	10.883			
900.0	900.0	898.0	898.0	3.1	3.1	-90.47	-0.5	-60.0	60.0	53.8	6.23	9.631			
1,000.0	1,000.0	998.0	998.0	3.5	3.5	-90.47	-0.5	-60.0	60.0	53.1	6.95	8.637			
1,100.0	1,100.0	1,098.0	1,098.0	3.8	3.8	-90.47	-0.5	-60.0	60.0	52.3	7.66	7.829			
1,200.0	1,200.0	1,198.0	1,198.0	4.2	4.2	-90.47	-0.5	-60.0	60.0	51.6	8.38	7.159			
1,300.0	1,300.0	1,298.0	1,298.0	4.6	4.5	-90.47	-0.5	-60.0	60.0	50.9	9.10	6.595			
1,400.0	1,400.0	1,398.0	1,398.0	4.9	4.9	-90.47	-0.5	-60.0	60.0	50.2	9.81	6.113			
1,500.0	1,500.0	1,498.0	1,498.0	5.3	5.3	-90.47	-0.5	-60.0	60.0	49.5	10.53	5.697			
1,600.0	1,600.0	1,598.0	1,598.0	5.6	5.6	-90.47	-0.5	-60.0	60.0	48.8	11.25	5.334			
1,700.0	1,700.0	1,698.0	1,698.0	6.0	6.0	-90.47	-0.5	-60.0	60.0	48.0	11.97	5.014			
1,800.0	1,800.0	1,798.0	1,798.0	6.3	6.3	-90.47	-0.5	-60.0	60.0	47.3	12.68	4.731			
1,900.0	1,900.0	1,898.0	1,898.0	6.7	6.7	-90.47	-0.5	-60.0	60.0	46.6	13.40	4.478			
2,000.0	2,000.0	1,998.0	1,998.0	7.1	7.1	-90.47	-0.5	-60.0	60.0	45.9	14.12	4.250 CC, ES			
2,100.0	2,100.0	2,097.1	2,097.0	7.4	7.4	121.49	-2.0	-60.7	61.7	46.9	14.79	4.168 SF			
2,200.0	2,199.8	2,195.9	2,195.8	7.7	7.7	121.33	-6.5	-63.0	66.7	51.3	15.44	4.321			
2,300.0	2,299.5	2,294.5	2,293.9	8.1	8.0	121.05	-14.0	-66.7	75.1	59.0	16.08	4.671			
2,400.0	2,398.7	2,392.5	2,391.3	8.4	8.4	120.72	-24.5	-72.0	86.9	70.2	16.73	5.192			
2,500.0	2,497.5	2,489.9	2,487.5	8.7	8.7	120.36	-37.9	-78.6	102.0	84.6	17.39	5.864			
2,600.0	2,595.6	2,588.1	2,584.2	9.1	9.1	120.57	-53.2	-86.2	119.7	101.6	18.08	6.621			
2,700.0	2,693.4	2,686.3	2,681.0	9.5	9.4	121.59	-68.4	-93.8	138.4	119.6	18.79	7.364			
2,800.0	2,791.3	2,784.6	2,777.7	9.9	9.8	122.36	-83.7	-101.4	157.0	137.5	19.51	8.048			
2,900.0	2,889.1	2,882.8	2,874.4	10.3	10.1	122.97	-99.0	-109.0	175.8	155.5	20.25	8.679			
3,000.0	2,986.9	2,981.0	2,971.2	10.7	10.5	123.46	-114.3	-116.6	194.5	173.5	21.00	9.262			
3,100.0	3,084.7	3,079.2	3,067.9	11.1	10.9	123.86	-129.5	-124.2	213.2	191.5	21.76	9.800			
3,200.0	3,182.5	3,177.4	3,164.6	11.5	11.3	124.20	-144.8	-131.7	231.9	209.4	22.52	10.298			
3,300.0	3,280.3	3,275.7	3,261.3	11.9	11.7	124.49	-160.1	-139.3	250.7	227.4	23.30	10.759			
3,400.0	3,378.1	3,373.9	3,358.1	12.3	12.1	124.74	-175.3	-146.9	269.4	245.4	24.09	11.187			
3,500.0	3,476.0	3,472.1	3,454.8	12.7	12.5	124.95	-190.6	-154.5	288.2	263.3	24.88	11.585			
3,600.0	3,573.8	3,570.3	3,551.5	13.2	12.9	125.14	-205.9	-162.1	307.0	281.3	25.68	11.956			
3,700.0	3,671.6	3,668.5	3,648.2	13.6	13.3	125.31	-221.2	-169.7	325.7	299.3	26.48	12.301			
3,800.0	3,769.4	3,766.8	3,745.0	14.1	13.7	125.46	-236.4	-177.3	344.5	317.2	27.29	12.624			
3,900.0	3,867.2	3,865.0	3,841.7	14.5	14.1	125.59	-251.7	-184.9	363.3	335.2	28.10	12.926			
4,000.0	3,965.0	3,963.2	3,938.4	15.0	14.5	125.71	-267.0	-192.5	382.0	353.1	28.92	13.209			
4,100.0	4,062.8	4,061.4	4,035.2	15.4	14.9	125.82	-282.3	-200.1	400.8	371.1	29.74	13.475			
4,200.0	4,160.7	4,159.6	4,131.9	15.9	15.3	125.92	-297.5	-207.7	419.6	389.0	30.57	13.724			
4,300.0	4,258.5	4,257.9	4,228.6	16.3	15.8	126.02	-312.8	-215.3	438.4	407.0	31.40	13.959			
4,400.0	4,356.3	4,356.1	4,325.3	16.8	16.2	126.10	-328.1	-222.9	457.1	424.9	32.24	14.181			
4,467.8	4,422.6	4,422.7	4,390.9	17.1	16.5	126.15	-338.4	-228.0	469.9	437.1	32.80	14.324			
4,500.0	4,454.1	4,454.3	4,422.1	17.2	16.6	126.26	-343.3	-230.4	475.8	442.7	33.07	14.387			
4,600.0	4,552.5	4,552.8	4,519.1	17.7	17.0	126.33	-358.7	-238.1	492.9	459.0	33.90	14.540			
4,700.0	4,651.4	4,651.6	4,616.3	18.1	17.4	126.07	-374.0	-245.7	508.0	473.3	34.72	14.632			
4,800.0	4,750.8	4,750.4	4,713.7	18.5	17.9	125.49	-389.4	-253.3	521.1	485.6	35.53	14.669			
4,900.0	4,850.5	4,851.8	4,813.6	18.9	18.3	124.61	-405.0	-261.1	532.3	496.0	36.34	14.649			
5,000.0	4,950.4	4,959.3	4,920.0	19.2	18.7	123.62	-418.8	-268.0	540.5	503.4	37.16	14.545			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Permian Resources
Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design:EL CAMPEON FED COM PROJECT - EL CAMPEON FED COM 511H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program:	0-MWD										Rule Assigned:		Offset Well Error:	0.0 usft
Reference	Measured	Vertical	Offset	Vertical	Semi Major Axis	Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Reference	Offset	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor		
5,067.8	5,018.3	5,032.7	4,992.8	19.4	19.0	-89.01	-426.2	-271.6	544.2	506.5	37.70	14.437		
5,100.0	5,050.4	5,067.6	5,027.6	19.5	19.2	-89.32	-429.1	-273.1	545.5	507.6	37.94	14.379		
5,200.0	5,150.4	5,176.5	5,136.3	19.8	19.6	-90.02	-435.8	-276.4	548.6	509.9	38.68	14.181		
5,300.0	5,250.4	5,285.9	5,245.6	20.2	20.0	-90.34	-438.8	-277.9	549.9	510.5	39.39	13.961		
5,400.0	5,350.4	5,388.7	5,348.4	20.5	20.3	-90.35	-439.0	-278.0	550.0	510.0	40.04	13.735		
5,500.0	5,450.4	5,488.7	5,448.4	20.8	20.6	-90.35	-439.0	-278.0	550.0	509.3	40.68	13.519		
5,600.0	5,550.4	5,588.7	5,548.4	21.1	20.9	-90.35	-439.0	-278.0	550.0	508.7	41.33	13.309		
5,700.0	5,650.4	5,688.7	5,648.4	21.4	21.2	-90.35	-439.0	-278.0	550.0	508.0	41.97	13.104		
5,800.0	5,750.4	5,788.7	5,748.4	21.7	21.6	-90.35	-439.0	-278.0	550.0	507.4	42.62	12.905		
5,900.0	5,850.4	5,888.7	5,848.4	22.1	21.9	-90.35	-439.0	-278.0	550.0	506.7	43.27	12.711		
6,000.0	5,950.4	5,988.7	5,948.4	22.4	22.2	-90.35	-439.0	-278.0	550.0	506.1	43.92	12.523		
6,100.0	6,050.4	6,088.7	6,048.4	22.7	22.5	-90.35	-439.0	-278.0	550.0	505.4	44.57	12.339		
6,200.0	6,150.4	6,188.7	6,148.4	23.0	22.8	-90.35	-439.0	-278.0	550.0	504.8	45.23	12.160		
6,300.0	6,250.4	6,288.7	6,248.4	23.4	23.2	-90.35	-439.0	-278.0	550.0	504.1	45.89	11.986		
6,400.0	6,350.4	6,388.7	6,348.4	23.7	23.5	-90.35	-439.0	-278.0	550.0	503.5	46.55	11.816		
6,500.0	6,450.4	6,488.7	6,448.4	24.0	23.8	-90.35	-439.0	-278.0	550.0	502.8	47.21	11.651		
6,600.0	6,550.4	6,588.7	6,548.4	24.3	24.1	-90.35	-439.0	-278.0	550.0	502.1	47.87	11.490		
6,700.0	6,650.4	6,688.7	6,648.4	24.7	24.5	-90.35	-439.0	-278.0	550.0	501.5	48.53	11.332		
6,800.0	6,750.4	6,788.7	6,748.4	25.0	24.8	-90.35	-439.0	-278.0	550.0	500.8	49.20	11.179		
6,900.0	6,850.4	6,888.7	6,848.4	25.3	25.1	-90.35	-439.0	-278.0	550.0	500.1	49.87	11.030		
7,000.0	6,950.4	6,988.7	6,948.4	25.7	25.5	-90.35	-439.0	-278.0	550.0	499.5	50.53	10.884		
7,100.0	7,050.4	7,088.7	7,048.4	26.0	25.8	-90.35	-439.0	-278.0	550.0	498.8	51.20	10.741		
7,200.0	7,150.4	7,188.7	7,148.4	26.3	26.1	-90.35	-439.0	-278.0	550.0	498.1	51.88	10.603		
7,300.0	7,250.4	7,288.7	7,248.4	26.7	26.5	-90.35	-439.0	-278.0	550.0	497.5	52.55	10.467		
7,400.0	7,350.4	7,388.7	7,348.4	27.0	26.8	-90.35	-439.0	-278.0	550.0	496.8	53.22	10.335		
7,500.0	7,450.4	7,488.7	7,448.4	27.3	27.1	-90.35	-439.0	-278.0	550.0	496.1	53.90	10.205		
7,600.0	7,550.4	7,588.7	7,548.4	27.7	27.5	-90.35	-439.0	-278.0	550.0	495.4	54.57	10.079		
7,700.0	7,650.4	7,688.7	7,648.4	28.0	27.8	-90.35	-439.0	-278.0	550.0	494.8	55.25	9.955		
7,800.0	7,750.4	7,788.7	7,748.4	28.3	28.1	-90.35	-439.0	-278.0	550.0	494.1	55.92	9.835		
7,900.0	7,850.4	7,888.7	7,848.4	28.7	28.5	-90.35	-439.0	-278.0	550.0	493.4	56.60	9.717		
8,000.0	7,950.4	7,988.7	7,948.4	29.0	28.8	-90.35	-439.0	-278.0	550.0	492.7	57.28	9.602		
8,100.0	8,050.4	8,088.7	8,048.4	29.3	29.2	-90.35	-439.0	-278.0	550.0	492.0	57.96	9.489		
8,200.0	8,150.4	8,188.7	8,148.4	29.7	29.5	-90.35	-439.0	-278.0	550.0	491.4	58.64	9.379		
8,300.0	8,250.4	8,288.7	8,248.4	30.0	29.8	-90.35	-439.0	-278.0	550.0	490.7	59.33	9.271		
8,400.0	8,350.4	8,388.7	8,348.4	30.4	30.2	-90.35	-439.0	-278.0	550.0	490.0	60.01	9.165		
8,500.0	8,450.4	8,488.7	8,448.4	30.7	30.5	-90.35	-439.0	-278.0	550.0	489.3	60.69	9.062		
8,600.0	8,550.4	8,588.7	8,548.4	31.0	30.9	-90.35	-439.0	-278.0	550.0	488.6	61.38	8.961		
8,700.0	8,650.4	8,688.7	8,648.4	31.4	31.2	-90.35	-439.0	-278.0	550.0	487.9	62.06	8.862		
8,800.0	8,750.4	8,788.7	8,748.4	31.7	31.5	-90.35	-439.0	-278.0	550.0	487.3	62.75	8.765		
8,900.0	8,850.4	8,888.7	8,848.4	32.1	31.9	-90.35	-439.0	-278.0	550.0	486.6	63.43	8.671		
9,000.0	8,950.4	8,988.7	8,948.4	32.4	32.2	-90.35	-439.0	-278.0	550.0	485.9	64.12	8.578		
9,100.0	9,050.4	9,088.7	9,048.4	32.8	32.6	-90.35	-439.0	-278.0	550.0	485.2	64.81	8.487		
9,200.0	9,150.4	9,188.7	9,148.4	33.1	32.9	-90.35	-439.0	-278.0	550.0	484.5	65.50	8.397		
9,300.0	9,250.4	9,288.7	9,248.4	33.4	33.2	-90.35	-439.0	-278.0	550.0	483.8	66.19	8.310		
9,400.0	9,350.4	9,388.7	9,348.4	33.8	33.6	-90.35	-439.0	-278.0	550.0	483.1	66.88	8.224		
9,500.0	9,450.4	9,488.7	9,448.4	34.1	33.9	-90.35	-439.0	-278.0	550.0	482.4	67.57	8.140		
9,600.0	9,550.4	9,588.7	9,548.4	34.5	34.3	-90.35	-439.0	-278.0	550.0	481.8	68.26	8.058		
9,700.0	9,650.4	9,688.7	9,648.4	34.8	34.6	-90.35	-439.0	-278.0	550.0	481.1	68.95	7.977		
9,800.0	9,750.4	9,788.7	9,748.4	35.2	35.0	-90.35	-439.0	-278.0	550.0	480.4	69.64	7.898		
9,900.0	9,850.4	9,888.7	9,848.4	35.5	35.3	-90.35	-439.0	-278.0	550.0	479.7	70.33	7.820		
10,000.0	9,950.4	9,988.7	9,948.4	35.8	35.7	-90.35	-439.0	-278.0	550.0	479.0	71.03	7.744		
10,100.0	10,050.4	10,088.7	10,048.4	36.2	36.0	-90.35	-439.0	-278.0	550.0	478.3	71.72	7.669		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Permian Resources

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED COM 511H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Ellipses (usft)				
10,200.0	10,150.4	10,188.7	10,148.4	36.5	36.3	-90.35	-439.0	-278.0	550.0	477.6	72.41	7.595		
10,300.0	10,250.4	10,288.7	10,248.4	36.9	36.7	-90.35	-439.0	-278.0	550.0	476.9	73.11	7.523		
10,400.0	10,350.4	10,388.7	10,348.4	37.2	37.0	-90.35	-439.0	-278.0	550.0	476.2	73.80	7.452		
10,500.0	10,450.4	10,488.7	10,448.4	37.6	37.4	-90.35	-439.0	-278.0	550.0	475.5	74.50	7.383		
10,600.0	10,550.4	10,588.7	10,548.4	37.9	37.7	-90.35	-439.0	-278.0	550.0	474.8	75.19	7.315		
10,700.0	10,650.4	10,688.7	10,648.4	38.3	38.1	-90.35	-439.0	-278.0	550.0	474.1	75.89	7.248		
10,800.0	10,750.4	10,788.7	10,748.4	38.6	38.4	-90.35	-439.0	-278.0	550.0	473.4	76.58	7.182		
10,900.0	10,850.4	10,888.7	10,848.4	39.0	38.8	-90.35	-439.0	-278.0	550.0	472.7	77.28	7.117		
11,000.0	10,950.4	10,988.7	10,948.4	39.3	39.1	-90.35	-439.0	-278.0	550.0	472.0	77.98	7.053		
11,100.0	11,050.4	11,088.7	11,048.4	39.7	39.5	-90.35	-439.0	-278.0	550.0	471.3	78.68	6.991		
11,200.0	11,150.4	11,188.7	11,148.4	40.0	39.8	-90.35	-439.0	-278.0	550.0	470.6	79.37	6.929		
11,300.0	11,250.4	11,288.7	11,248.4	40.4	40.2	-90.35	-439.0	-278.0	550.0	469.9	80.07	6.869		
11,400.0	11,350.4	11,388.7	11,348.4	40.7	40.5	-90.35	-439.0	-278.0	550.0	469.2	80.77	6.810		
11,500.0	11,450.4	11,488.7	11,448.4	41.0	40.9	-90.35	-439.0	-278.0	550.0	468.5	81.47	6.751		
11,573.1	11,523.5	11,561.8	11,521.5	41.3	41.1	-90.35	-439.0	-278.0	550.0	468.0	81.98	6.709		
11,575.0	11,525.4	11,563.7	11,523.4	41.3	41.1	90.21	-439.0	-278.0	550.0	468.0	81.99	6.708		
11,600.0	11,550.4	11,588.7	11,548.4	41.4	41.2	90.29	-439.0	-278.0	550.0	467.8	82.16	6.694		
11,625.0	11,575.3	11,613.6	11,573.3	41.5	41.3	90.50	-439.0	-278.0	550.0	467.7	82.34	6.680		
11,650.0	11,600.1	11,638.4	11,598.1	41.6	41.4	90.84	-439.0	-278.0	550.1	467.6	82.52	6.666		
11,675.0	11,624.7	11,663.0	11,622.7	41.7	41.5	91.31	-439.0	-278.0	550.2	467.5	82.69	6.653		
11,700.0	11,648.9	11,687.2	11,646.9	41.8	41.5	91.89	-439.0	-278.0	550.3	467.5	82.87	6.641		
11,725.0	11,672.9	11,711.2	11,670.9	41.9	41.6	92.57	-439.0	-278.0	550.6	467.6	83.05	6.630		
11,750.0	11,696.4	11,734.7	11,694.4	42.0	41.7	93.34	-439.0	-278.0	551.1	467.9	83.23	6.621		
11,775.0	11,719.5	11,757.8	11,717.5	42.1	41.8	94.18	-439.0	-278.0	551.8	468.4	83.41	6.615		
11,800.0	11,742.0	11,780.3	11,740.0	42.2	41.9	95.07	-439.0	-278.0	552.7	469.2	83.58	6.613		
11,825.0	11,763.9	11,802.2	11,761.9	42.3	41.9	96.00	-439.0	-278.0	554.1	470.3	83.76	6.615		
11,850.0	11,785.2	11,823.5	11,783.2	42.4	42.0	96.94	-439.0	-278.0	555.8	471.9	83.93	6.623		
11,875.0	11,805.7	11,844.0	11,803.7	42.5	42.1	97.88	-439.0	-278.0	558.0	473.9	84.09	6.636		
11,900.0	11,825.5	11,863.8	11,823.5	42.6	42.2	98.78	-439.0	-278.0	560.8	476.6	84.26	6.656		
11,925.0	11,844.4	11,882.7	11,842.4	42.7	42.2	99.62	-439.0	-278.0	564.2	479.8	84.41	6.684		
11,950.0	11,862.5	11,900.8	11,860.5	42.8	42.3	100.39	-439.0	-278.0	568.3	483.8	84.56	6.721		
11,975.0	11,879.6	11,917.9	11,877.6	42.9	42.4	101.06	-439.0	-278.0	573.2	488.5	84.70	6.767		
12,000.0	11,895.8	11,934.1	11,893.8	43.1	42.4	101.61	-439.0	-278.0	578.9	494.0	84.84	6.823		
12,025.0	11,910.9	11,949.2	11,908.9	43.2	42.5	102.02	-439.0	-278.0	585.4	500.4	84.96	6.890		
12,050.0	11,925.0	11,963.3	11,923.0	43.3	42.5	102.27	-439.0	-278.0	592.8	507.7	85.08	6.967		
12,075.0	11,938.0	11,976.3	11,936.0	43.4	42.6	102.34	-439.0	-278.0	601.1	515.9	85.19	7.056		
12,100.0	11,949.8	11,988.1	11,947.8	43.5	42.6	102.22	-439.0	-278.0	610.3	525.0	85.28	7.156		
12,125.0	11,960.5	11,998.8	11,958.5	43.7	42.6	101.88	-439.0	-278.0	620.4	535.0	85.36	7.268		
12,150.0	11,969.9	12,008.2	11,967.9	43.8	42.7	101.31	-439.0	-278.0	631.4	546.0	85.44	7.391		
12,175.0	11,978.2	12,016.5	11,976.2	43.9	42.7	100.49	-439.0	-278.0	643.4	557.9	85.50	7.525		
12,200.0	11,985.2	12,023.5	11,983.2	44.1	42.7	99.41	-439.0	-278.0	656.1	570.6	85.54	7.670		
12,225.0	11,990.9	12,029.2	11,988.9	44.2	42.7	98.06	-439.0	-278.0	669.7	584.1	85.58	7.825		
12,250.0	11,995.4	12,033.7	11,993.4	44.3	42.8	96.43	-439.0	-278.0	684.0	598.4	85.61	7.990		
12,275.0	11,998.5	12,036.8	11,996.5	44.5	42.8	94.51	-439.0	-278.0	699.1	613.4	85.62	8.165		
12,300.0	12,000.4	12,038.7	11,998.4	44.6	42.8	92.30	-439.0	-278.0	714.7	629.1	85.63	8.347		
12,323.1	12,001.0	12,039.3	11,999.0	44.7	42.8	90.00	-439.0	-278.0	729.7	644.0	85.62	8.522		
12,400.0	12,001.0	12,039.3	11,999.0	45.1	42.8	90.00	-439.0	-278.0	782.4	696.8	85.59	9.141		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Permian Resources

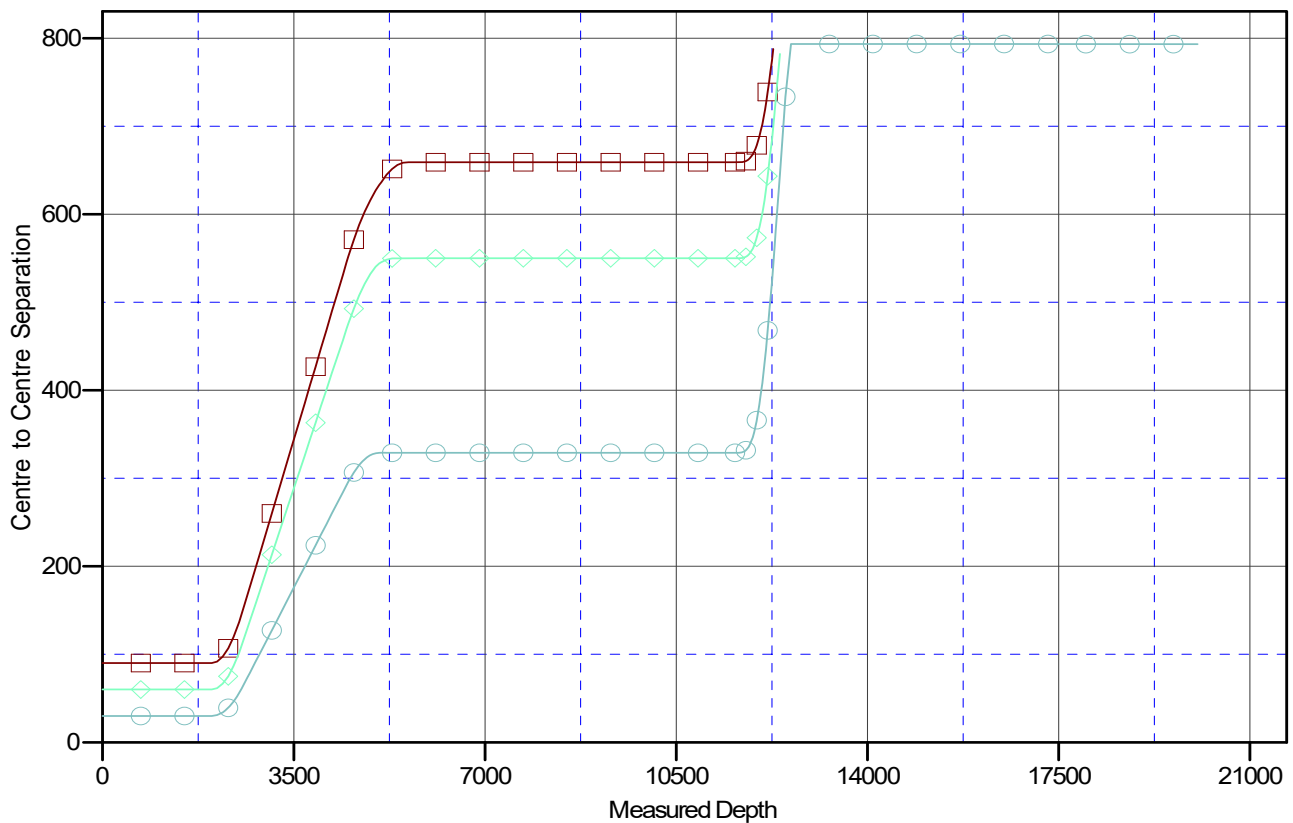
Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3202.0usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: EL CAMPEON FED COM 301H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.50°

Ladder Plot



LEGEND

■ EL CAMPEON FED COM401H,OWB/PWP0 V0
 ● EL CAMPEON FED COM431H,OWB/PWP0 V0
 ◆ EL CAMPEON FED COM511H,OWB/PWP0 V0

Permian Resources

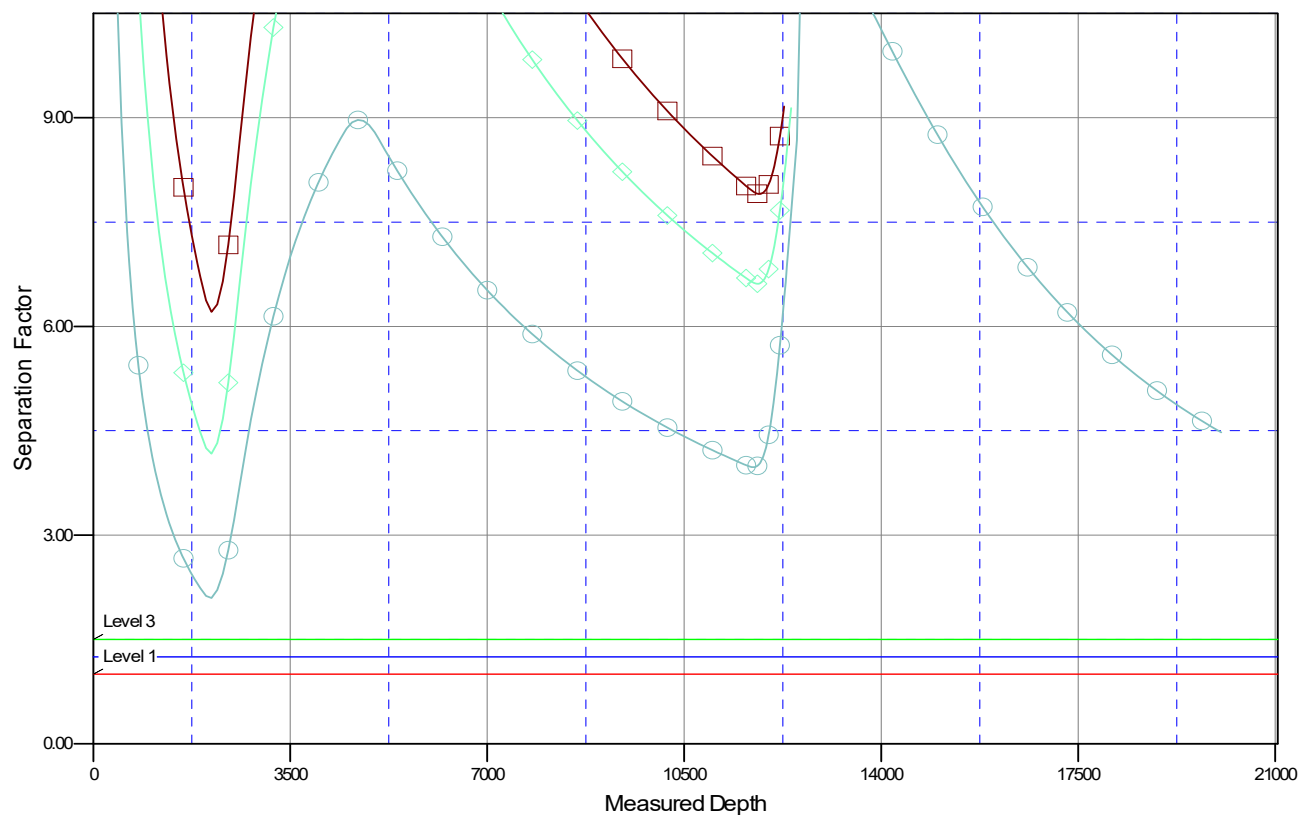
Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED COM 301H
Project:	(SP) LEA	TVD Reference:	KB @ 3202.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3202.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED COM 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3202.0usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: EL CAMPEON FED COM 301H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.50°

Separation Factor Plot



LEGEND

■ EL CAMPEON FED COM401H, OVB/PWP0 V0
 ◆ EL CAMPEON FED COM431H, OVB/PWP0 V0
 ● EL CAMPEON FED COM511H, OVB/PWP0 V0

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Earthstone
LEASE NO.:	NMNM139373
LOCATION:	Section 29, T.26 S, R.35 E., NMPM
COUNTY:	Lea County, New Mexico
WELL NAME & NO.:	El Campeon Fed Com 301H
SURFACE HOLE FOOTAGE:	1828'/N & 692'/W
BOTTOM HOLE FOOTAGE:	0'/S & 660'/W

*Previously known as **EL Campeon South Fed Com 201H**. Changes approved through engineering via **Sundry2769762** on **1-24-2024**. Any previous COAs not addressed within the updated COAs still apply.*

COA

H₂S	<input type="radio"/> Yes	<input checked="" type="radio"/> No		
Potash / WIPP	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P	<input type="checkbox"/> WIPP
Cave / Karst	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High	<input type="radio"/> Critical
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
Cementing	<input type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze	<input type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
Special Req	<input type="checkbox"/> Break Testing	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
Variance	<input checked="" type="checkbox"/> Flex Hose	<input type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Capitan Reef
Variance	<input type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	<input type="checkbox"/> Open Annulus
<input type="checkbox"/> Batch APD / Sundry				

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area must meet all requirements from **43 CFR 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **9-5/8** inch surface casing shall be set at approximately **1100** feet (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.

Wait on cement (WOC) time for a primary cement job is to include the tail cement slurry due to cave/karst.
3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi**. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)**Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

Offline Cementing

Contact the BLM prior to the commencement of any offline cementing procedure.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ Eddy County

Email **or** call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, BLM_NM_CFO_DrillingNotifications@BLM.GOV
(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

- a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
- b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours.

WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in **43 CFR part 3170 Subpart 3172** must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug.
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the valve on casing head below test plug open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a

maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

ZS 1/24/2024

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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 309933

CONDITIONS

Operator: Earthstone Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 331165
	Action Number: 309933
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	3/13/2024