Form 3160-3 (June 2015) UNITED STATES DEPARTMENT OF THE INT BUREAU OF LAND MANAG APPLICATION FOR PERMIT TO DR	FORM APPROVED OMB No. 1004-0137 Expires: January 31, 2018 5. Lease Serial No. NMNM125400 6. If Indian, Allotee or Tribe Name					
1a. Type of work:          ✓ DRILL        REE         1b. Type of Well:          ✓ Oil Well        Gas Well        Other         1c. Type of Completion:       Hydraulic Fracturing          ✓ Sing	7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. EL CAMPEON FEDERAL COM					
2. Name of Operator         PERMIAN RESOURCES OPERATING LLC         3a. Address         300 N MARIENFELD ST SUITE 1000, MIDLAND, TX 7970 (4         4. Location of Well (Report location clearly and in accordance with At surface SESW / 352 FSL / 2071 FWL / LAT 32.022493: At proposed prod. zone LOT 3 / 0 FSL / 1980 FWL / LAT 3	h any State requirements.*) 3 / LONG -103.391261	9. API Well No. 30-025-546 10. Field and Pool, o WC-025 G-08 S263	r Exploratory 3412K/BONE SPRING Blk. and Survey or Area			
location to nearest property or lease line, ft.		12. County or Parish     13. State       LEA     NM       acing Unit dedicated to this well				
to nearest well, drilling, completed, applied for, on this lease, ft.       1         21. Elevations (Show whether DF, KDB, RT, GL, etc.)       2		LM/BIA Bond No. in file NMB001841 23. Estimated duration 30 days				
The following, completed in accordance with the requirements of C (as applicable) 1. Well plat certified by a registered surveyor. 2. A Drilling Plan.	4. Bond to cover the operation Item 20 above).	Hydraulic Fracturing ru				
<ul> <li>3. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).</li> <li>25. Signature (Electronic Submission)</li> <li>Title</li> </ul>	Lands, the 5. Operator certification. 6. Such other site specific info BLM. Name ( <i>Printed/Typed</i> ) JENNIFER ELROD / Ph: (432) 69		Date 08/18/2024			
Senior Regulatory Analyst Approved by (Signature) (Electronic Submission) Title Assistant Field Manager Lands & Minerals Application approval does not warrant or certify that the applicant H applicant to conduct operations thereon. Canditions of approval, if one are attached	Name (Printed/Typed) CODY LAYTON / Ph: (575) 234-5 Office Carlsbad Field Office nolds legal or equitable title to those rights	959	Date 04/01/2025			
Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, mak of the United States any false, fictitious or fraudulent statements or			ny department or agency			



(Continued on page 2)

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# INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws 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, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: 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 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., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

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

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. 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 Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

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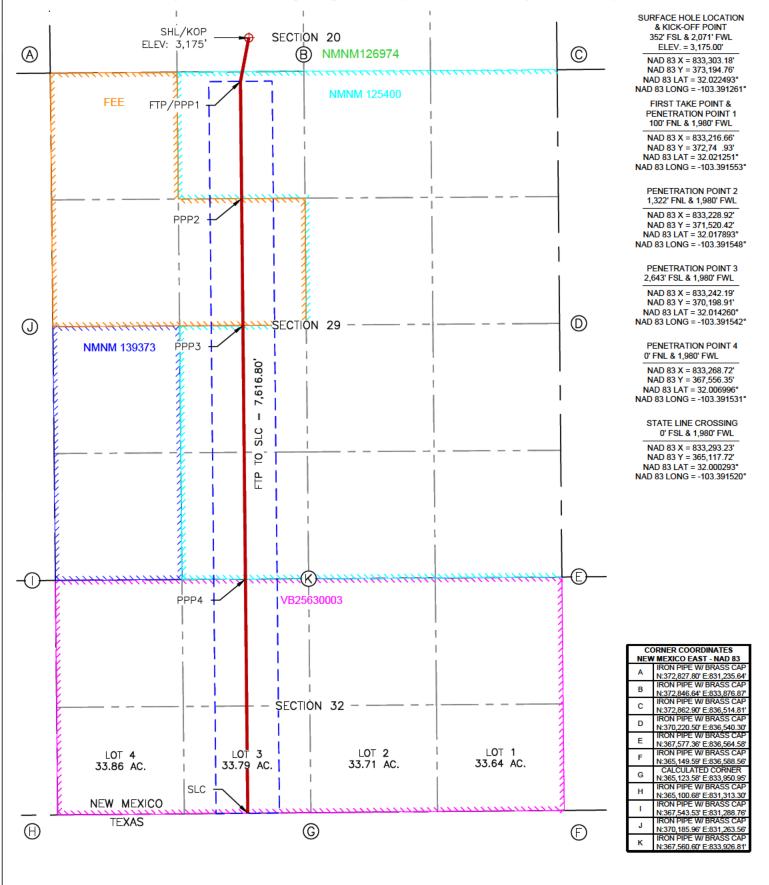
<u>C-10</u>	<u>)2</u>		En			iral Resources Dep	partment		I	Revised July 9, 2024			
	Electronically Dermitting	4		OIL	CONSERVA	TION DIVISION			Initial Su	ıbmittal			
	21 crimiting							Submittal	Amende				
								Type:	As Drille	•			
					WELL LOCAT	ON INFORMATION							
API Nu	Imber 30-02	25-54602	Pool Code	9667	2	Pool Name		0624104	(· Popo G	Poring			
Proper	tu Codo	337197	Property N			WC-025 G-08 S263412K; Bone Spring							
OGRIE		001101	Operator N	lame	EL CAMPEO	N FED COM			122H Ground Lev	vel Elevation			
	37216	-	-	PEF		RCES OPERATING,				3,175'			
	Surface Owr	ner: 🗆 State	□ Fee □ T	ribal 🗹 F	ederal	Mineral Ow	ner: 🗹 State	e 🗆 Fee 🗆	] Tribal 🗹 Fe	ederal			
						ce Location							
JL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		ongitude	County			
N	20	26 S	35 E					493 -1	03.391261	LEA			
JL	Section	Township	Range	Lot	State L Ft. from N/S	ine Crossing Ft. from E/W	Latitude		ongitude	County			
OT 3	32	26 S	35 E		0' FSL	1,980' FWL	32.0002		03.391520	LEA			
010	52	203	55 E		UFSL	.,	52.0007	-1	00.031520				
Dedica	ted Acres	Infill or Defin	ing Well	Defining	g Well API	Overlapping Spacin	g Unit (Y/N)	Consolidat	ion Code				
233	8.79	Definir	ng	Pe	nding	Y							
Order I	Numbers.		<u> </u>			Well setbacks are under Common Ownership: Yes INo							
					Kick O	ff Point (KOP)							
JL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Lo	ongitude	County			
N	20	26 S	35 E		352' FSL	2,071' FWL			03.391261	LEA			
						ake Point (FTP)							
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Lo	ongitude	County			
С	29	26 S	35 E		100' FNL	1,980' FWL	32.0212	231 -10	03.381973	LEA			
						ake Point (LTP)							
JL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Lo	ongitude	County			
Jnitize	d Area or A	rea of Uniform	Interest	Spacing	g Unit Type 🔀 Ho	orizontal 🗆 Vertical	Grou	nd Floor Ele		205'			
		TIFICATIONS				SURVEYOR CERTIF							
			antained herei		d complete to the								
pest of i	my knowledge	e and belief, and	I, if the well is	a vertical o	d complete to the r directional well,	I hereby certify that the v actual surveys made by			at was plotted and that the s	from field notes of ame is true and			
					ed mineral interest a right to drill this	actual surveys made by correct to the best of my	belief.	MEN	P				
					working interest or it or a compulsory		2	EN MEXICO	).~ )				
		ore entered by t						(12177)					
		ntal well, I furthe st one lessee or			ition has received		RECR	MAR.	, or of the second seco				
mineral	interest in ea	ch tract (in the ta	arget pool or fo	ormation) in	which any part of pulsory pooling		CIAL A	[////	SE				
order fro	's completed	niverval will be lo	caled of obtai				(°)	POFESSIONAL					
	MUU	AUL	JUUL	/	8/9/2024	Rignature and Oral of D			Date: 8/1/20	24			
Signatu	/	V	D	ate		Signature and Seal of Pr	olessional Sur	veyor					
	nifer Elro	Ja				Cortificate Number	Date of Sur	101/					
-mited	Manne					Certificate Number		TIDE/2024					
	if an all a					40477	7/26/2024		126/2024				
-		d@perm	ianres.co	om		12177		7/	/26/2024				

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

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



	Eı	ergy, Minerals a Oil Co 1220 S	e of New Mez nd Natural Res nservation Di outh St. Fran ta Fe, NM 87	ources Departme vision cis Dr.	ent		Subr Via l	nit Electronically E-permitting
	N	ATURAL GA	AS MANA	GEMENT PI	LAN			
This Natural Gas Manag	gement Plan m	ist be submitted wi	th each Applicat	tion for Permit to I	Drill (A	PD) for a r	new oi	recompleted well.
			<u>1 – Plan D</u> fective May 25,					
I. Operator: <u>Permian</u>	Resources	Operating, LL	<u>.C</u> ogrid:	372165		Date:	<u>07 /</u>	<u>23 / 202</u> 4
II. Type: 🛛 Original 🗆	] Amendment	due to $\Box$ 19.15.27.	9.D(6)(a) NMA	C 🗆 19.15.27.9.D(	6)(b) N	IMAC 🗆 C	Other.	
If Other, please describe	:							
<b>III. Well(s):</b> Provide the be recompleted from a s					wells p	roposed to	be dri	lled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D		icipated MCF/D	Р	Anticipated roduced Water BBL/D
SEE ATTACHED	WELL LIST	-						
IV. Central Delivery Po	oint Name: <u> </u>	<u>I Campeon Cl</u>	B 20	•		[See 19	9.15.2	7.9(D)(1) NMAC]
V. Anticipated Schedul proposed to be recomple					vell or s	set of wells	propo	osed to be drilled or
Well Name	API	Spud Date	TD Reached Date	Completion Commencement		Initial F Back D		First Production Date
SEE ATTACHED	WELL LIS	T						
VI. Separation Equipm VII. Operational Pract	t <b>ices: 口</b> Attac	h a complete descr						
Subsection A through F VIII. Best Managemen during active and planne	nt Practices: 8	Attach a complet	e description of	Operator's best n	nanager	ment practi	ices to	o minimize venting

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## Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

 $\Box$  Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

#### IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF
SEE ATTACHED WELL LIST			

#### X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering	Available Maximum Daily Capacity
			Start Date	of System Segment Tie-in
Targa	Targa Northern	39-26S-35E	8/1/2025	15 mmcf/d
Resources	Delaware	00 200 002		

**XI. Map.**  $\searrow$  Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system  $\mathbf{x}$  will  $\Box$  will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator  $\square$  does  $\square$  does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

 $\square$  Attach Operator's plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:**  $\searrow$  Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

# Section 3 - Certifications Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

 $\sum_{k=1}^{\infty}$  Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

 $\Box$  Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. *If Operator checks this box, Operator will select one of the following:* 

Well Shut-In.  $\Box$  Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan.  $\Box$  Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

# Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

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I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:									
Printed Name: Jennifer Elrod									
Title: Sr. Regulatory Analyst									
E-mail Address: jennifer.elrod@permianres.com									
Date: 7/24/2024									
Phone: 940-452-6214									
OIL CONSERVATION DIVISION									
OIL CONSERVATION DIVISION									
(Only applicable when submitted as a standalone form)									
(Only applicable when submitted as a standalone form)									
(Only applicable when submitted as a standalone form) Approved By:									
(Only applicable when submitted as a standalone form) Approved By: Title:									
(Only applicable when submitted as a standalone form)   Approved By:   Title:   Approval Date:									
(Only applicable when submitted as a standalone form)   Approved By:   Title:   Approval Date:									
(Only applicable when submitted as a standalone form)   Approved By:   Title:   Approval Date:									

#### Permian Resources Operating, LLC (372165)

#### **Natural Gas Management Plan Descriptions**

#### VI. Separation Equipment:

Permian utilizes a production forecast from our Reservoir Engineering team to appropriately size each permanent, 3-phase separator and heater treater utilized for production operations. Our goal is to maintain 5 minutes of retention time in the test vessel and 20 minutes in the heater treater at peak production rates. The gas produced is routed from the separator to the gas sales line.

#### VII. Operational Practices:

#### Drilling

During Permian's drilling operations it is uncommon for venting or flaring to occur. If flaring is needed due to safety concerns, gas will be routed to a flare and volumes will be estimated.

#### Flowback

During completion/recompletion flowback operations, after separation flowback begins and as soon as it is technically feasible, Permian routes gas though a permanent separator and the controlled facility where the gas is either sold or flared through a high-pressure flare if needed.

#### Production

Per 19.15.27.8.D, Permian's facilities are designed to minimize waste. Our produced gas will only be vented or flared in an emergency or malfunction situation, except as allowed for normal operations noted in 19.15.27.8.D(2) & (4). All gas that is flared is metered. All gas that may be vented will be estimated.

#### Performance Standards

Permian utilizes a production forecast from our Reservoir Engineering team to appropriately size each permanent, 3-phase separator and heater treater utilized for production operations.

All of Permian's permanent storage tanks associated with production operations which are routed to a flare or control device are equipped with an automatic gauging system.

All of Permian's flare stacks, both currently installed and for future installation, are:

- 1) Appropriately sized and designed to ensure proper combustion efficiency.
- 2) Equipped with an automatic ignitor or continuous pilot.
- 3) Anchored and located at least 100 feet from the well and storage tanks.

Permian's field operations and HSE teams have implemented an AVO inspection schedule that adheres to the requirements of 19.15.27.8.E(5).

All of our operations and facilities are designed to minimize waste. We routinely employ the following methods and practices:

- Closed-loop systems
- Enclosed and properly sized tanks

- Vapor recovery units to maximize recovery of low-pressure gas streams and potential unauthorized emissions
- Low-emitting or electric engines whenever practical
- Combustors and flare stacks in the event of a malfunction or emergency
- Routine facility inspections to identify leaking components, functioning control devices, such as flares and combustors, and repair / replacement of malfunctioning components where applicable

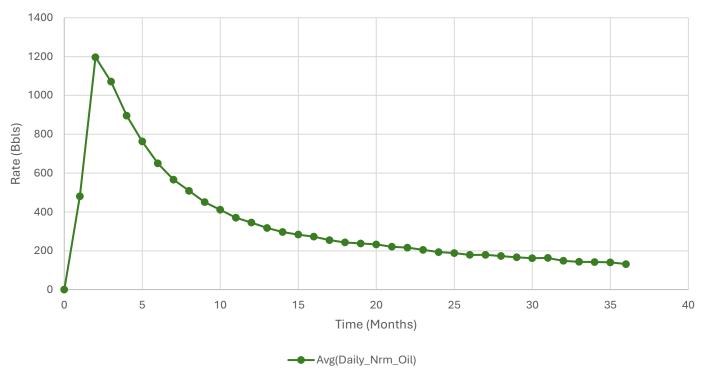
#### Measurement or estimation

Permian measures or estimates the volumes of natural gas vented, flared and/or beneficially used for all of our drilling, completing and producing wells. We utilize accepted industry standards and methodology which can be independently verified. Annual GOR testing is completed on our wells and will be submitted as required by the OCD. None of our equipment is designed to allow diversion around metering elements except during inspection, maintenance and repair operations.

#### VIII. Best Management Practices:

Permian utilizes the following BMPs to minimize venting during active and planned maintenance activities:

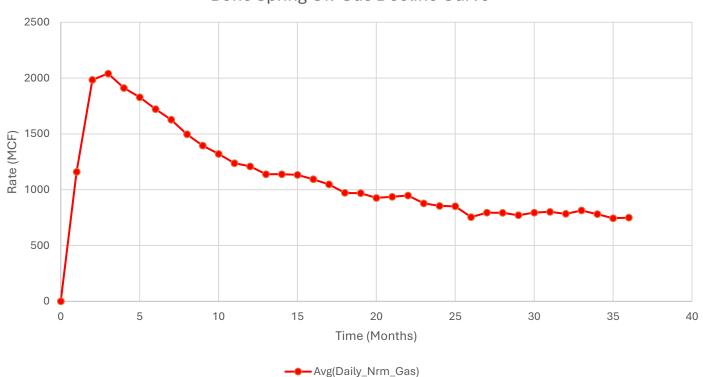
- Use a closed-loop process wherever possible during planned maintenance activities, such as blowdowns, liquid removal, and work over operations.
- Employ low-emitting or electric engines for equipment, such as compressors
- Adhere to a strict preventative maintenance program which includes routine facility inspections, identification of component malfunctions, and repairing or replacing components such as hatches, seals, valves, etc. where applicable
- Utilize vapor recovery units (VRU's) to maximize recovery of volumes of low-pressure gas streams and potential unauthorized emissions
- Route low pressure gas and emissions streams to a combustion device to prevent venting where necessary



# Bone Spring Oil Decline Curve

- 1. Represented curve is generic based on 3-Years available information for the Bone Spring formation and may not be representative of forecasted production or actual volumes.
- 2. Decline curves are based on an average 10,000ft lateral length. Multiple factors may influence production and decline curves, including but not limited to: lateral length and completion type.

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Bone Spring Oil-Gas Decline Curve

- 1. Represented curve is generic based on 3-Years available information for the Bone Spring formation and may not be representative of forecasted production or actual volumes.
- 2. Decline curves are based on an average 10,000ft lateral length. Multiple factors may influence production and decline curves, including but not limited to: lateral length and completion type.

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# Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
15330976	RUSTLER	2427	1040	1040	SANDSTONE	USEABLE WATER	N
15330977	TOP SALT	927	1500	1500	SALT	NONE	N
15330979	LAMAR	-2907	5334	5334	SANDSTONE	NONE	N
15330981	CHERRY CANYON	-2951	5378	5378	SANDSTONE	NATURAL GAS, OIL	N
15330983	BONE SPRING LIME	-6847	9274	9274	LIMESTONE, SHALE	NATURAL GAS, OIL	N
15330984	BONE SPRING 1ST	-7993	10420	10420	LIMESTONE, SANDSTONE, SHALE	NATURAL GAS, OIL	N
15330975	BONE SPRING 2ND	-8423	10850	10850	LIMESTONE, SANDSTONE	NATURAL GAS, OIL	Y

# Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 12300

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

#### Requesting Variance? YES

Variance request: Variance request: Multibowl Wellhead, Flexhose, Breaktesting, Offline Cementing Variances. Attachments in Section 8.

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

#### Choke Diagram Attachment:

Operator Name: PERMIAN RESOURCES OPERATING LLC Well Name: EL CAMPEON FEDERAL COM

Well Number: 122H

### 5M\_Choke\_Manifold\_20240621114516.pdf

#### BOP Diagram Attachment:

5M\_BOP\_20240621114521.pdf

# **Section 3 - Casing**

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	1065	0	1065	3175	2110	1065	J-55	54.5	BUTT	2.15	1.69	DRY	5.75	DRY	5.4
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	5284	0	5284	3533	-2109	5284	J-55	40	BUTT	2.57	1.54	DRY	2.29	DRY	2.02
3	PRODUCTI ON	8.75	5.5	NEW	non Api	N	0	21615	0	11300	3533	-8125	21615	oth Er		other - Geoco <b>nn</b>	1.27	1.33	DRY	1.87	DRY	1.87

#### **Casing Attachments**

Casing ID: 1 String SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

#### Casing Design Assumptions and Worksheet(s):

El\_Campeon\_Fed\_122H\_Csg\_Assumptions\_20240818183845.pdf

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Operator Name: PERMIAN RESOURCES OPERATING LLC

Well Name: EL CAMPEON FEDERAL COM

Well Number: 122H

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#### **Casing Attachments**

Casing ID: 2	String	INTERMEDIATE
Inspection Document:		
/		
Spec Document:		
Tapered String Spec:		
Casing Design Assum	otions and W	/orksheet(s):
El_Campeon_Fed	_122H_Csg_	Assumptions_20240818183753.pdf
Casing ID: 3	String	PRODUCTION
Inspection Document:		
Spec Document:		
17_GeoConn_Pro	d_SpecSheet	_20240726103620.pdf
Tapered String Spec:		

# Casing Design Assumptions and Worksheet(s):

El\_Campeon\_Fed\_122H\_Csg\_Assumptions\_20240818183651.pdf

Section	4 - Ce	emen	τ								
String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	852	640	1.88	12.7	1190	100	CLASS C	ECONOCEM-HLC + 5% SALT + 5% KOL- SEAL
SURFACE	Tail		852	1065	830	1.34	14.8	1110	50	Class C	ACCELERATOR
INTERMEDIATE	Lead		0	4220	900	2.08	12.7	1870	50	CLASS C	EconoCem-HLC + 5% Salt + 5% Kol-Seal
INTERMEDIATE	Tail		4220	5284	380	1.34	14.8	500	50	CLASS C	Retarder
PRODUCTION	Lead		4784	1081 9	870	2.41	11.5	2090	40	Class H	POZ, Extender, Fluid Loss, Dispersant,

# Section 4 - Cement

# Operator Name: PERMIAN RESOURCES OPERATING LLC Well Name: EL CAMPEON FEDERAL COM

Well Number: 122H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	saviti ppp Additives Retarder
PRODUCTION	Tail		1081 9	2161 5	1400	1.73	12.5	2420	25		POZ, Extender, Fluid Loss, Dispersant, Retarder

# Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with 43 CFR 3172:

Diagram of the equipment for the circulating system in accordance with 43 CFR 3172:

**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.

# **Circulating Medium Table**

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	Н	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1065	SPUD MUD	8.6	9.5							
1065	5284	SALT SATURATED	10	10							
5284	2161 5	OTHER : WATER BASED MUD - 5284'- 11573' OBM-11573' - 21615'	9	10							

Page 20 of 102

Operator Name: PERMIAN RESOURCES OPERATING LLC Well Name: EL CAMPEON FEDERAL COM

Well Number: 122H

# Section 6 - Test, Logging, Coring

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

Will utilize MWD/LWD from intermediate hole to TD of the well

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

Coring operation description for the well:

N/A

# Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5880

Anticipated Surface Pressure: 3393

Anticipated Bottom Hole Temperature(F): 167

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

Describe:

Contingency Plans geoharzards description:

**Contingency Plans geohazards** 

#### Hydrogen Sulfide drilling operations plan required? YES

#### Hydrogen sulfide drilling operations

El\_Campeon\_H2S\_20240816102229.pdf

# **Section 8 - Other Information**

#### Proposed horizontal/directional/multi-lateral plan submission:

El\_Champeon\_Fed\_Com\_122H\_DD\_20240818184225.pdf

El\_Champeon\_Fed\_Com\_122H\_AC\_20240818184225.pdf

#### Other proposed operations facets description:

WASTE MANAGEMENT PLAN

## Other proposed operations facets attachment:

El\_Camp\_NGMP\_20240816123908.pdf

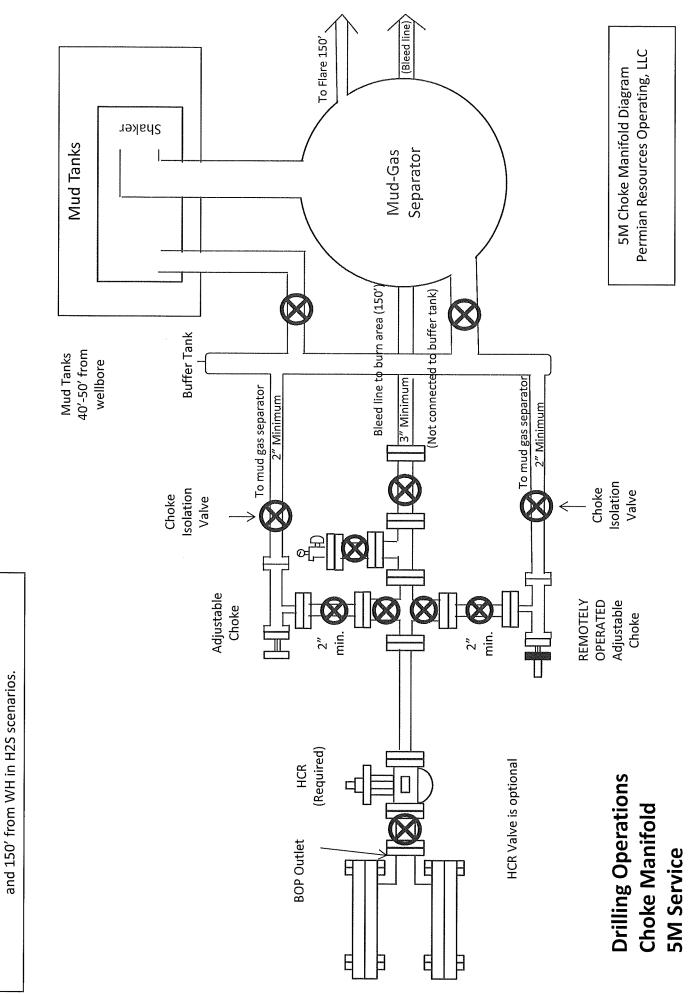
#### Other Variance attachment:

El\_Camp\_BOP\_Break\_20240816102305.pdf

El\_Camp\_Batch\_20240816102335.pdf

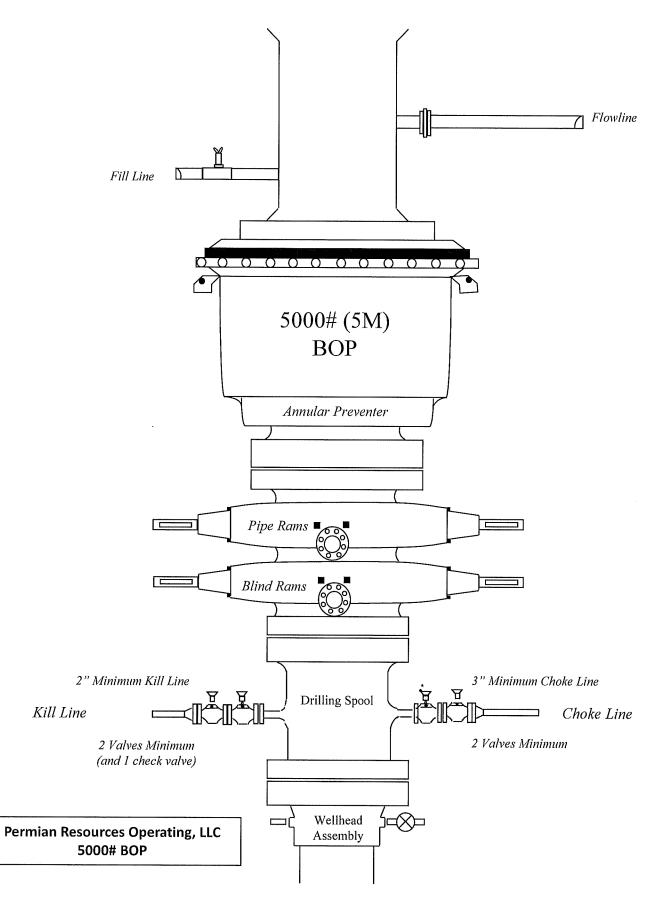
- El\_Camp\_FH\_20240816102352.pdf
- El\_Camp\_OLCV\_20240816102415.pdf

El\_Camp\_MBS\_20241126112435.pdf



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Bleed lines will discharge 100' from WH in non-H2S scenarios



Bleed lines will discharge 100' from WH in non-H2S scenarios and 150' from WH in H2S scenarios.

.

l One Corp.	GEOCONN- Pipe: SeAH P110RY 95%PBW		Page	MAI GC 5.5 17 SeAH P110F 95%RBW+SC-Cplg6.050 P110							
Metal One	Coupling: P110RY (SM		Date		Feb-21						
wienni One		25426.522.53	Rev.	3-1	0						
	Connection Data	a Sheet	Sneet Rev.		U						
	Geometry	Impe	erial	S.	<u>I.</u>						
	Pipe Body										
	Grade *1	P110RY	-	P110RY	÷						
	SMYS	110	ksi	110	ksi						
	Pipe OD ( D )	5.500	în	139.70	mm						
GEOCONN-SC	Weight	17.00	lb/ft	25.33	kg/m						
	Wall Thickness (t)	0.304	in	7.72	mm						
	Pipe ID (d)	4.892	in	124.26	mm						
Wsc1	Drift Dia.	4.767	in	121.08	mm						
D	Connection	Connection									
	Coupling SMYS	110	ksi	110	ksi						
+ š	SC-Coupling OD (Wsc1)	6.050	in	153.67	mm						
3 d	Coupling Length ( NL )	8.350	in	212.09	mm						
5	Make up Loss	4,125	in	104.78	mm						
1 1	Pipe Critical Area	4.96	in <sup>2</sup>	3.202	mm <sup>2</sup>						
1	Box Critical Area	6.10	in <sup>2</sup>	3,937							
5	NERMOSIAND AND ARESSER	0.10			SSO AND						
5	Thread Taper Number of Threads			3/4" per ft )							
- S	Performance Properties for P	Imperial		<u>S.I.</u>							
		ipe Body									
	S.M.Y.S. *1	ipe Body 546	kips	2 428	kN						
			kips psi	2,428 79.66	kN MPa						
·	S.M.Y.S. *1	546									
    	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Spec M.I.Y.P. = Mini *1: SeAH P110RY 95%RBW: SMY	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pro /S110ksi, MIYP11,550	psi psi Strength of Pipe essure of Pipe b	79.66 51.59 body	MPa						
N	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Spec M.I.Y.P. = Mini *1: SeAH P110RY 95%RBW: SMY Performance Properties for C	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pro /S110ksi, MIYP11,550	psi psi Strength of Pipe essure of Pipe b psi	79.66 51.59 Body ody	MPa						
N	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Sper M.I.Y.P. = Mini *1: SeAH P110RY 95%RBW: SMY Performance Properties for ( Min. Connection Joint Strength	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pro /S110ksi, MIYP11,550	psi psi Strength of Pipe essure of Pipe b psi 100%	79.66 51.59 body of S.M.Y.S.	MPa						
N	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Spec M.I.Y.P. = Mini *1: SeAH P110RY 95%RBW: SMY Performance Properties for C Min. Connection Joint Strength Min. Compression Yield	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pro /S110ksi, MIYP11,550	psi psi Strength of Pipe essure of Pipe b psi 100% 100%	79.66 51.59 body ody of <u>S.M.Y.S.</u> of S.M.Y.S.	MPa						
N	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Spec M.I.Y.P. = Mini *1: SeAH P110RY 95%RBW: SMY Performance Properties for ( Min. Connection Joint Strength Min. Compression Yield Internal Pressure	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pro /S110ksi, MIYP11,550	psi psi Strength of Pipe b psi 100% 100% 100% of M.I.	79.66 51.59 body ody of S.M.Y.S. of S.M.Y.S. Y.P.	MPa						
N	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Spec M.I.Y.P. = Mini *1: SeAH P110RY 95%RBW: SMY Performance Properties for C Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pro /S110ksi, MIYP11,550	psi psi Strength of Pipe b psi 100% 100% 100% of M.I. 100% of Colla	79.66 51.59 body ody of S.M.Y.S. of S.M.Y.S. Y.P.	MPa						
	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Spec M.I.Y.P. = Mini *1: SeAH P110RY 95%RBW: SMY Performance Properties for ( Min. Connection Joint Strength Min. Compression Yield Internal Pressure	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pro /S110ksi, MIYP11,550	psi psi Strength of Pipe b psi 100% 100% 100% of M.I. 100% of Colla	79.66 51.59 body ody of S.M.Y.S. of S.M.Y.S. Y.P. upse Strength	MPa						
	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Spec M.I.Y.P. = Mini *1: SeAH P110RY 95%RBW: SMY Performance Properties for C Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure Max. DLS ( deg. /100ft) Recommended Torque	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pre (S110ksi, MIYP11,550 Connection	psi psi Strength of Pipe b psi 100% 100% 100% of M.I. 100% of Colla	of S.M.Y.S. of S.M.Y.S. of S.M.Y.S. Y.P. upse Strength >90	MPa MPa						
	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Spec M.I.Y.P. = Mini *1: SeAH P110RY 95%RBW: SMY Performance Properties for C Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure Max. DLS ( deg. /100ft) Recommended Torque Min.	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pre (S110ksi, MIYP11,550 Connection	psi psi Strength of Pipe b psi 100% 100% 100% of M.I. 100% of Colla ft-lb	79.66 51.59 body ody of S.M.Y.S. of S.M.Y.S. Y.P. apse Strength >90 14,600	MPa MPa N-m						
	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Spec M.I.Y.P. = Mini *1: SeAH P110RY 95%RBW: SMY Performance Properties for (C Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure Max. DLS ( deg. /100ft) Recommended Torque Min. Opti.	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pre (S110ksi, MIYP11,550 Connection 10,800 12,000	psi psi Strength of Pipe b psi 100% 100% 100% of M.I. 100% of Colla ft-lb	79.66 51.59 body ody of S.M.Y.S. of S.M.Y.S. Y.P. appes Strength >90 14,600 16,200	MPa MPa MPa N-m N-m						
	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Spec M.I.Y.P. = Mini *1: SeAH P110RY 95% RBW: SMY Performance Properties for (C Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure Max. DLS ( deg. /100ft) Recommended Torque Min. Opti. Max.	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pre S110ksi, MIYP11,550 Connection 10,800 12,000 13,200	psi psi Strength of Pipe b psi 100% 100% 100% of M.I. 100% of Colla ft-lb ft-lb	79.66 51.59 body ody of S.M.Y.S. of S.M.Y.S. Y.P. upse Strength >90 14,600 16,200 17,800	MPa MPa MPa N-m N-m						
	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Sper M.I.Y.P. = Mini *1: SeAH P110RY 95%RBW: SMY Performance Properties for ( Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure Max. DLS ( deg. /100ft) Recommended Torque Min. Opti. Max. Operational Max.	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pre (S110ksi, MIYP11,550 Connection 10,800 12,000 13,200 15,600	psi psi Strength of Pipe essure of Pipe bi psi 100% 100% 100% of M.I.' 100% of Colla ft-lb ft-lb ft-lb ft-lb	79.66 51.59 body ody of S.M.Y.S. of S.M.Y.S. Y.P. appes Strength >90 14,600 16,200	MPa MPa MPa N-m N-m						
	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Spec M.I.Y.P. = Mini *1: SeAH P110RY 95% RBW: SMY Performance Properties for (C Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure Max. DLS ( deg. /100ft) Recommended Torque Min. Opti. Max.	546 11,550 7,480 cified Minimum YIELD imum Internal Yield Pre (S110ksi, MIYP11,550 Connection 10,800 12,000 13,200 15,600	psi psi Strength of Pipe essure of Pipe bi psi 100% 100% 100% of M.I.' 100% of Colla ft-lb ft-lb ft-lb ft-lb	79.66 51.59 body ody of S.M.Y.S. of S.M.Y.S. Y.P. upse Strength >90 14,600 16,200 17,800	MPa MPa MPa N-m N-m						
	S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Sper M.I.Y.P. = Mini *1: SeAH P110RY 95%RBW: SMY Performance Properties for ( Min. Connection Joint Strength Min. Compression Yield Internal Pressure External Pressure Max. DLS ( deg. /100ft) Recommended Torque Min. Opti. Max. Operational Max.	546           11,550           7,480           cified Minimum YIELD           imum Internal Yield Pre           (S110ksi, MIYP11,550)           Connection           10,800           12,000           13,200           15,600           can be applied for high to	psi psi Strength of Pipe b psi 100% 100% 100% of M.I. 100% of Colla ft-lb ft-lb ft-lb ft-lb ft-lb rtub	79.66 51.59 body ody of S.M.Y.S. of S.M.Y.S. Y.P. upse Strength >90 14,600 16,200 17,800 21,100	MPa MPa N-m N-m N-m N-m						

Statements regarding the suitability of products for oertain types of applications are based on Metal One's knowledge of typical requirements that are often placed on Metal One products in standard well configurations. Such statements are not binding statements about the suitability of products for a particular application. It is the outsomer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application The products described in his Connection Data Sneet are not recommended for use in deep water offshore applications. For more information, please refer to <u>http://www.mto.co.jo/mo-con/\_Images/top/WebsiteTerms\_Active\_20333287\_1.pdf</u> the contents of which are incorporated by reference into this Connection Data Sneet.

# 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	17.5	13.375	0	1065	0	1065	1065	J55	54.5	BTC	2.15	1.69	Dry	5.75	Dry	5.40
Intermediate	12.25	9.625	0	5284	0	5284	5284	J55	40	BTC	2.57	1.54	Dry	2.29	Dry	2.02
Production	8.75	5.5	0	11573	0	11300	11573	P110RY	17	GeoConn	1.27	1.33	Dry	1.87	Dry	1.87
Production	7.875	5.5	11573	21615	11300	11300	10042	P110RY	17	GeoConn	1.27	1.33	Dry	1.87	Dry	1.87
								BLM M	1.125	1		1.6		1.6		

Non API casing spec sheets and casing design assumptions attached.

# Permian Resources BOP Break Testing Variance Procedure

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

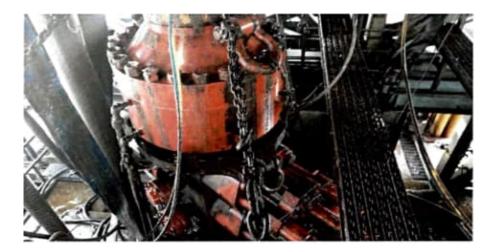
### **Background**

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

### Supporting Documentation

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

Figure 1: Winch System attached to BOP Stack



# Figure 2: BOP Winch System



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

		Pressure Test-High Pressure**						
Component to be Pressure Tested	Pressure Test—Low Pressure** psig (MPa)	Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket					
Annular preventer*	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.					
Fixed pipe, variable bore, blind, and BSR preventers <sup>∞</sup>	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP					
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2 41)	RWP of side outlet valve or wellhead system, whichever is lower	пр					
Choke manifold—upstream of chokes*	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP					
Choke manifold—downstream of chokes*	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or M whichever is lower	ASP for the well program,					
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program						
Annular(s) and VBR(s) shall be pre For pad drilling operations, moving pressure-controlling connections For surface offshore operations, th	during the evaluation period. The p ssure lested on the largest and sma from one wellhead to another within when the integray of a pressure set ie ram BOPs shall be pressure test land operations, the ram BOPs sha	ressure shall not decrease below the allest OD drill pipe to be used in well the 21 days, pressure testing is req al is broken. ed with the ram locks engaged and II be pressure tested with the ram loc	program. ured for pressure-containing an the closing and locking pressure					

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

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

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

#### **Procedures**

1) Permian Resources will use this document for our break testing plan for New Mexico Delaware Basin. The summary below will be referenced in the APD or Sundry Notice and receive approval prior to implementing this variance.

2) Permian Resources will perform BOP break testing on multi-wells pads where multiple intermediate sections can be drilled and cased within the 21-day BOP test window.

a)A full BOP test will be conducted on the first well on the pad.

b)The first intermediate hole section drilled on the pad will be the deepest. All the remaining hole sections will be the same formation depth or shallower.

c) A full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.

d) A full BOP test will be required prior to drilling any production hole.

3) After performing a complete BOP test on the first well, the intermediate hole section will be drilled and cased, two breaks would be made on the BOP equipment.

a) Between the HCV valve and choke line connection

b)Between the BOP quick connect and the wellhead

4) The BOP is then lifted and removed from the wellhead by a hydraulic system.

5) After skidding to the next well, the BOP is moved to the wellhead by the same hydraulic system and installed.

6) The connections mentioned in 3a and 3b will then be reconnected.

7) Install test plug into the wellhead using test joint or drill pipe.

8) A shell test is performed against the upper pipe rams testing the two breaks.

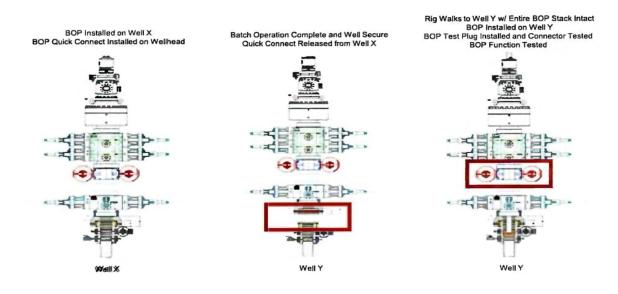
9) The shell test will consist of a 250 psi low test and a high test to the value submitted in the APD or Sundry (e.g. 5,000 psi or 10,000psi).

10) Function tests will be performed on the following components: lower pipe rams, blind rams, and annular.

11) For a multi-well pad the same two breaks on the BOP would be made and on the next wells and steps 4 through 10 would be repeated.

12) A second break test would only be done if the intermediate hole section being drilled could not be completed within the 21 day BOP test window.

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



#### Summary

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

The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control

event occurs prior to the commencement of a BOPE Break Testing operation.

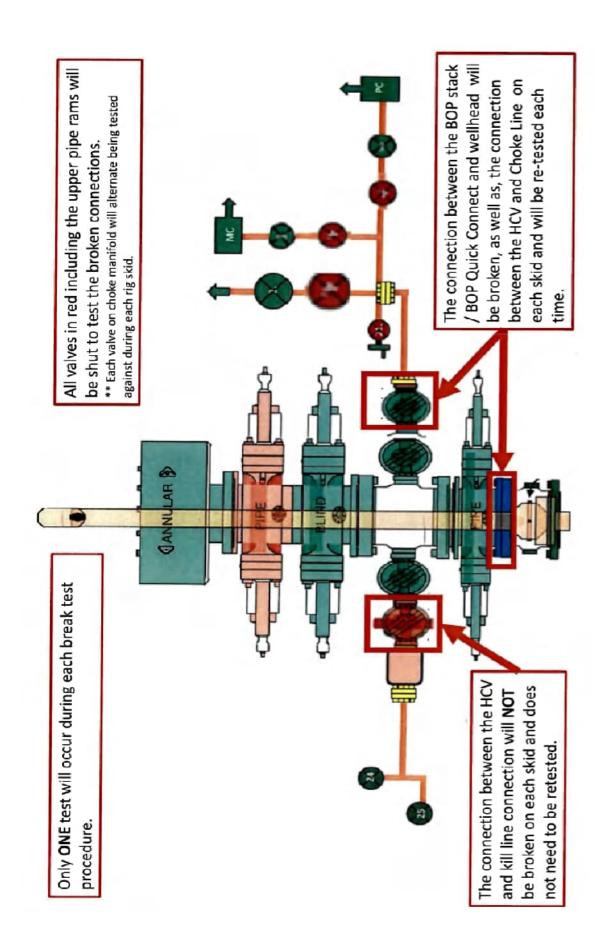
Based on public data and the supporting documentation submitted herein to the BLM, we will request permission to ONLY retest broken pressure seals if the following conditions are met:

1) After a full BOP test is conducted on the first well on the pad.

2) The first intermediate hole section drilled on the pad will be the deepest. All the remaining hole sections will be the same depth or shallower.

3) A full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.

4) A full BOP test will be required prior to drilling the production hole.



# Permian Resources Multi-Well Pad Batch Drilling Procedure

<u>Surface Casing</u> - 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.

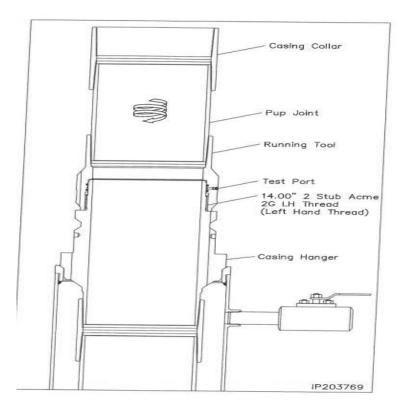


Illustration 1-1

<u>Intermediate Casing</u> – 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.

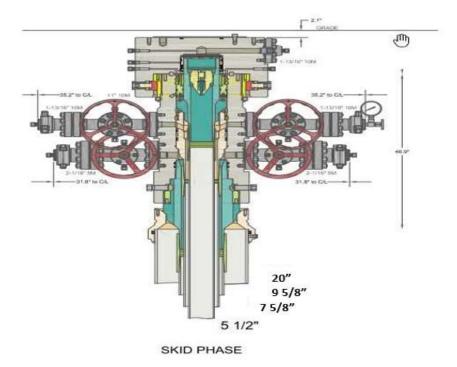
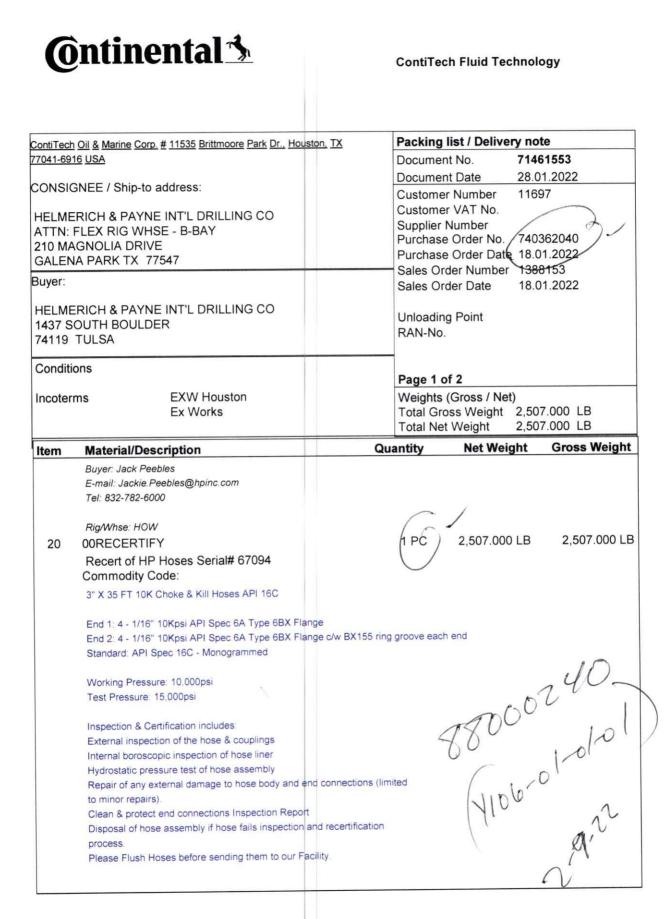


Illustration 2-2

<u>Production Casing</u> – 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.



ContiTech Rubber Industrial Kft. H-6728 Szeged Budapesti út 10. P. O. Box 152 Szeged H-6701 Phone:(62)566-700, Fax (62)566-713 Tax Number: 11087209-2-06 EU Community VAT: HU11087209 Registration No. Cg. 0609-002502 Registry Court: Csongrád Megyei Cégbiróság

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COMMERZBANK ZRT. (HUF) H-1054 Budapest, Széchenyi rakpart 8. H-1245 Budapest P.O. Box 1070 Account No. 14220108-26830003 IBAN: HUB 1422 0108 2683 0003 0000 0000 SWIFT: COBA HU HXXXX COMMERZBANK AG Hannover (EUR) 30159 Hannover, Theaterstr. 11-12. Account No.: 3 066 156 00 Sort Code: 250 400 66 BIC: COBADEFF250 IBAN: DE41250400660306615600

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# Hydrostatic Test Certificate

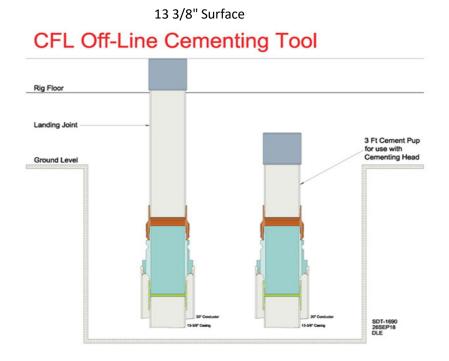
		ContiTech
Certificate Number H100122	COM Order Reference 1388153	Customer Name & Address HELMERICH & PAYNE DRILLING CO
Customer Purchase Order No:	740362040	1434 SOUTH BOULDER AVE TULSA, OK 74119
Project:		USA
Test Center Address	Accepted by COM Inspection	Accepted by Client Inspection
ContiTech Oil & Marine Corp. 11535 Brittmoore Park Drive	Gerson Mejia-Lazo	,
Houston, TX 77041	Signed:	
USA	Date: 02/09/22	

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

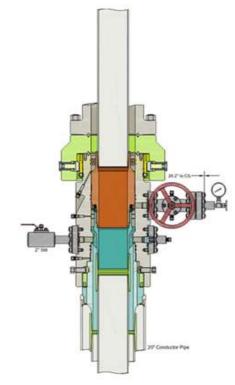
Item	Part No.			Qnty	Serial Number	Work. Press. (psi)	Test Press. (psi)	Test Time (minutes)	
20	RECERTIFICATION	3	" ID 10K Choke and Kill Hose x 35ft OAL		1	67094	10,000	15,000	60
	Record In	formation		Pre	essure	Chart			
	Start Time	1/27/2022 13:21:21	16000						
	End Time	1/27/2022 14:38:28	- Ist 16000-					Pressure	
	Interval	00:01:00	14000-						
	Number	78	12000			01			
	MaxValue	15849			(se	n ON B			
	MinValue	-3	10000		181	181			
	AvgValue	14240		6	9/	12	1		
	RecordName	67094-sh	- 0008	1	7	in the second se	1		
	RecordNumber	199	6000		G	The I	1		
	Gauge Int	formation	4000		1		/		
	Model	ADT680			1				
	SN	21817380014	2000		-	QC			
	Range	(0-40000)psi							
	Unit	psi							
	Unit	psi	4	30:00 13:46	:40	14:03:20	14:20:00	14:36:40	

#### Permian Resources Offline Cementing Procedure Surface & Intermediate Casing

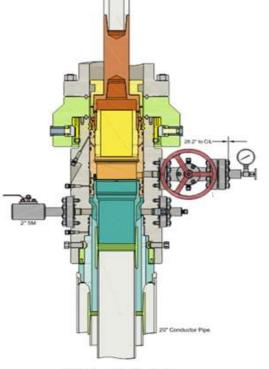
- 1. Drill hole to Total Depth with Rig and perform wellbore cleanup cycles.
- 2. Run and casing to Depth.
- 3. Land casing with mandrel.
- 4. Circulate 1.5 csg capacity.
- 5. Flow test Confirm well is static and floats are holding.
- 6. Set Annular packoff and pressure test. Test to 5k.
- 7. Nipple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



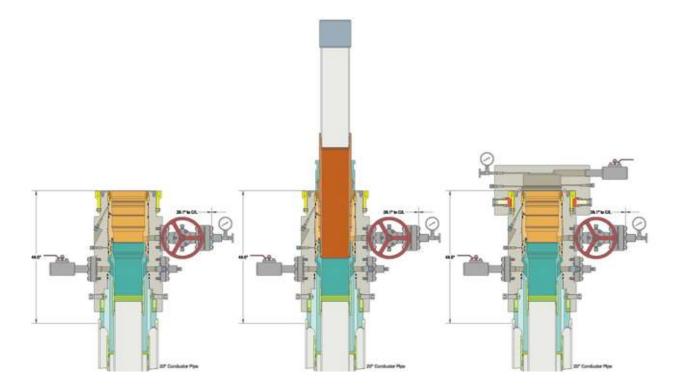
#### Intermediate

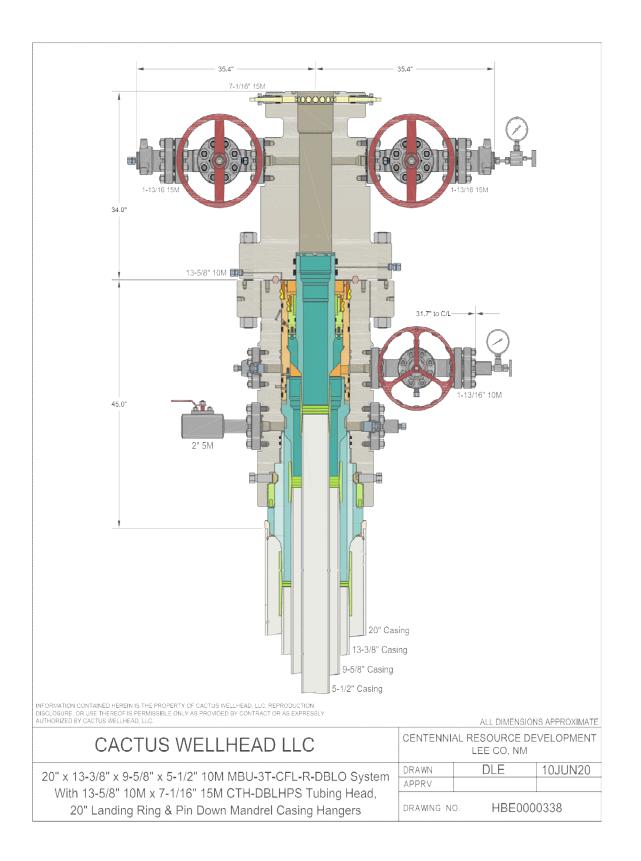


Run 7 5/8" Casing Land Casing on 7 5/8" Mandrel Hanger Cement 7 5/8" Casing Retrieve Running Tool



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





# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:Permian Resources Operating LLCWELL NAME & NO.:El Campeon Federal Com 122HLOCATION:Sec 20-26S-35E-NMPCOUNTY:Lea County, New Mexico

# COA

H <sub>2</sub> S	$\odot$	No	© Yes			
Potash / WIPP	None	Secretary	C R-111-Q	Open Annulus WIPP		
Cave / Karst	• Low	O Medium	O High	Critical		
Wellhead	Conventional	Multibowl	© Both	C Diverter		
Cementing	Primary Squeeze	🗆 Cont. Squeeze	EchoMeter	DV Tool		
Special Req	🗖 Capitan Reef	Water Disposal	COM	🗖 Unit		
Waste Prev.	C Self-Certification	🖲 Waste Min. Plan	C APD Submitted prior to 06/10/202			
Additional Language	<ul><li>Flex Hose</li><li>Four-String</li></ul>	<ul><li>Casing Clearance</li><li>Offline Cementing</li></ul>	<ul> <li>Pilot Hole</li> <li>Fluid-Filled</li> </ul>	Break Testing		

# 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 shall meet 43 CFR 3176 requirements, 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 **13-3/8** 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. *Set depth adjusted per BLM geologist.* 
  - 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 <u>8 hours</u> or <u>500</u> <u>pounds compressive strength</u>, 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.

#### Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

- 2. The minimum required fill of cement behind the **9-5/8** 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 lead cement slurry due to cave/karst, Capitan Reef, or potash.
- 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. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

### 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **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. <u>When the</u> <u>Communitization Agreement number is known, it shall also be on the sign.</u>

# **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

# **Offline Cementing**

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

**Approval Date: 04/01/2025** 

# **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)

## **Contact Lea County Petroleum Engineering Inspection Staff:**

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
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2<sup>nd</sup> 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. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

# 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. <u>Wait on cement (WOC) for Potash Areas:</u> 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 of both lead and tail cement, 2) until cement has been in place at least <u>8 hours</u>. 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. <u>Wait on cement (WOC) for Water Basin:</u> 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 <u>8 hours</u>. 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-Q 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 3172**.
- 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:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. 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.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. 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.
  - i. 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. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - ii. 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. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
  - iii. 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 casing valve 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 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- iv. 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.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. 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.
- vii. 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.
- viii. 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 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.

**Approval Date: 04/01/2025** 

# NEW MEXICO

(SP) LEA EL CAMPEON FED COM PROJECT EL CAMPEON FED STATE COM 122H

OWB

Plan: PWP0

# **Standard Planning Report - Geographic**

05 August, 2024

Planning Report - Geographic

Project Map System: Geo Datum: Map Zone: Site	US Stat North A	EA te Plane 1983 merican Datu												
Geo Datum: Map Zone: Site	North A			(SP) LEA										
		exico Eastern	m 1983		System D	atum:	М	ean Sea Level						
	EL CAMPEON FED COM PROJECT													
Site Position: From: Position Uncertain	Ma nty:	p 0.0	North Easti usft Slot I	-	831,9	005.08 usft 976.77 usft 3-3/16 "	Latitude: Longitude:			32° 0' 59.423 N 103° 23' 44.166 W				
Well	EL CA	MPEON FED	STATE COM	122H										
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Wellbore	OWB													
Magnetics		del Name IGRF200510	Sampl	e Date 2/31/2009	Declina (°)		Dip A (°		Field St (n1 48,693					
Design	PWP0	1							-					
Audit Notes:	1 11 0	•												
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			0.0		0.0	0	.0	17	9.92					
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Plan Sections														
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0.0 2,000.0 2,037.8 10,819.1 11,573.3 21,615.7	0.00 0.00 0.76 0.76 90.00 90.00	0.00 0.00 311.81 311.81 179.42 179.42	0.0 2,000.0 2,037.8 10,818.3 11,300.0 11,300.0	0.0 0.0 77.5 -400.0 -10,441.9	0.0 0.0 -0.2 -86.6 -86.5 14.3	0.00 0.00 2.00 0.00 12.00 0.00	0.00 0.00 2.00 0.00 11.83 0.00	0.00 0.00 0.00 -17.55 0.00	0.00 0.00 311.81 0.00 -132.38 0.00 B	SHL-EL CAMP 122				

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Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Company:	NEW MEXICO	TVD Reference:	KB @ 3205.0usft
Project:	(SP) LEA	MD Reference:	KB @ 3205.0usft
Site:	EL CAMPEON FED COM PROJECT	North Reference:	Grid
Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

#### Planned Survey

0         0         0         0         0         373 194 76         833 303 18         32***         120 976 N         103**         232 28 539 W           1000         0.00         0.00         0.00         0.00         373 194 76         833 303 18         32****         120 976 N         103***         232 28 539 W           3000         0.00         0.00         373 194 76         833 303 18         32****         120 976 N         103***         232 28 539 W           3000         0.00         0.00         373 194 76         833 303 18         32****         120 976 N         103***         22 85 39 W           4000         0.00         0.00         0.00         373 194 76         833 303 18         32****         120 976 N         103***         22 85 39 W           6000         0.00         0.00         0.00         373 194 76         833 303 18         32****         120 976 N         103***         22 85 39 W           10000         0.00         0.00         0.00         373 194 76         833 303 18         32****         120 976 N         103**         22 85 39 W           10000         0.00         0.00         0.00         0.373 194 76         833 303 18         32****** <th< th=""><th>Measured Depth (usft)</th><th>Inclination (°)</th><th>Azimuth (°)</th><th>Vertical Depth (usft)</th><th>+N/-S (usft)</th><th>+E/-W (usft)</th><th>Map Northing (usft)</th><th>Map Easting (usft)</th><th>Latitude</th><th>Longitude</th></th<>	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
100.0         0.00         0.00         373 194 76         833 303 18         32" 1 29 976 N         103" 22 28 539 W           300.0         0.00         0.00         373 194 76         833 303 18         32" 1 29 976 N         103" 22 28 539 W           400.0         0.00         0.00         300.0         0.00         373 194 76         833 303 18         32" 1 29 976 N         103" 22 28 539 W           500.0         0.00         0.00         500.0         0.00         0.00         373 194 76         833 303 18         32" 1 29 976 N         103" 22 85 539 W           600.0         0.00         0.00         500.0         0.00         0.01         373 194 76         833 303 18         32" 1 29 976 N         103" 22 85 539 W           900.0         0.00         0.00         0.00         373 194 76         833 303 18         32" 1 29 976 N         103" 22 85 539 W           1000.0         0.00         0.00         0.00         373 194 76         833 303 18         32" 1 20 976 N         103" 22 85 539 W           1000.0         0.00         0.00         373 194 76         833 303 18         32" 1 20 976 N         103" 22 85 539 W           1000.0         0.00         1000.0         0.00         373 194 76         833 303 18 <td>0.0</td> <td></td> <td></td> <td>0.0</td> <td></td> <td></td> <td>272 104 76</td> <td>922 202 19</td> <td></td> <td></td>	0.0			0.0			272 104 76	922 202 19		
2000         0.00         0.00         200.0         0.00         373,149.76         833,303.18         32° 1′ 20.976 N         103° 22 28.539 W           4000         0.00         0.00         400.0         0.00         373,149.76         833,303.18         32° 1′ 20.976 N         103° 22 28.539 W           600.0         0.00         0.00         600.0         0.00         373,149.76         833,303.18         32° 1′ 20.976 N         103° 22 28.539 W           600.0         0.00         600.0         0.00         373,149.76         833,303.18         32° 1′ 20.976 N         103° 22 28.539 W           700.0         0.00         0.00         600.0         0.00         373,149.76         833,303.18         32° 1′ 20.976 N         103° 22 28.539 W           900.0         0.00         0.00         0.00         373,149.76         833,303.18         32° 1′ 20.976 N         103° 22 28.539 W           1,000.0         0.00         1,000.0         0.00         373,149.76         833,303.18         32° 1′ 20.976 N         103° 22 28.539 W           1,000.0         0.00         1,000.0         0.00         373,149.76         833,303.18         32° 1′ 20.976 N         103° 22 28.539 W           1,000.0         0.00         1,000.0         0.										
300.0       0.00       300.0       0.0       373,19476       833,303,18       32*1*2.076 N       103*23*28.539 W         500.0       0.00       0.00       500.0       0.00       500.0       103*23*28.539 W         600.0       0.00       0.00       573,19476       833,303,18       32*1*2.076 N       103*23*28.539 W         700.0       0.00       0.00       700.0       0.00       737,19476       833,303,18       32*1*2.076 N       103*23*28.539 W         900.0       0.00       0.00       900.0       0.00       0.03*37,19476       833,303,18       32*1*2.0976 N       103*23*28.539 W         1000.0       0.00       0.00       0.00       373,19476       833,303,18       32*1*2.0976 N       103*23*28.539 W         1200.0       0.00       0.00       373,19476       833,303,18       32*1*2.0976 N       103*23*28.539 W         1200.0       0.00       0.00       373,19476       833,303,18       32*1*2.0976 N       103*23*28.539 W         1200.0       0.00       0.00       373,19476       833,303,18       32*1*2.0976 N       103*23*28.539 W         1200.0       0.00       0.00       373,19476       833,303,18       32*1*2.0976 N       103*23*28.539 W       1600.0										
400.0         0.00         0.00         373,19476         833,331.8         32*1*2.976 N         103*23*2.8539 W           600.0         0.00         0.00         600.0         0.00         373,19476         833,331.8         32*1*2.976 N         103*2.2*2.8539 W           700.0         0.00         0.00         600.0         0.00         373,19476         833,331.8         32*1*2.976 N         103*2.2*2.8539 W           900.0         0.00         0.00         373,19476         833,331.8         32*1*2.976 N         103*2.2*2.8539 W           900.0         0.00         0.00         373,19476         833,331.8         32*1*2.0976 N         103*2.2*2.8539 W           1,000.0         0.00         0.00         373,19476         833,331.8         32*1*2.0976 N         103*2.2*2.8539 W           1,000.0         0.00         0.00         1,300.0         0.00         373,19476         833,303.18         32*1*2.0976 N         103*2.2*2.8539 W           1,200.0         0.00         0.00         1,300.0         0.00         373,19476         833,303.18         32*1*2.0976 N         103*2.2*2.8539 W           1,200.0         0.00         1,400.0         0.00         1,31416         833,303.18         32*1*2.0976 N         103*2.2*2.8539 W </td <td></td>										
500.0         0.00         500.0         0.0         373,19476         833,303.18         32" 1" 2076 N         103" 23" 28:539 W           700.0         0.00         0.00         700.0         0.00         700.0         103" 23" 28:539 W           900.0         0.00         0.00         373,19476         833,303.18         32" 1" 20.976 N         103" 23" 28:539 W           900.0         0.00         0.00         973,19476         833,303.18         32" 1" 20.976 N         103" 23" 28:539 W           1,000.0         0.00         0.00         373,19476         833,303.18         32" 1" 20.976 N         103" 23" 28:539 W           1,000.0         0.00         1,000.0         0.0         373,19476         833,303.18         32" 1" 20.976 N         103" 23" 28:539 W           1,200.0         0.00         1,300.0         0.0         0.0" 373,19476         833,303.18         32" 1" 20.976 N         103" 23" 28:539 W           1,400.0         0.00         1,500.0         0.0         0.0" 373,19476         833,303.18         32" 1" 20.976 N         103" 23" 28:539 W           1,600.0         0.00         1,500.0         0.0         373,19476         833,303.18         32" 1" 20.976 N         103" 23" 28:539 W           1,600.0         0								· · · · · · · · · · · · · · · · · · ·		
600         0.00         0.00         600.0         0.00         373 194 76         833 303 18         32* 1* 20 976 N         103* 22* 28 539 W           800.0         0.00         0.00         800.0         0.00         373 194 76         833 303 18         32* 1* 20 976 N         103* 22* 28 539 W           900.0         0.00         0.00         373 194 76         833 303 18         32* 1* 20 976 N         103* 22* 28 539 W           1,000.0         0.00         1,000.0         0.00         373 194 76         833 303 18         32* 1* 20 976 N         103* 22* 28 539 W           1,000.0         0.00         0.00         1,000.0         0.00         373 194 76         833 303 18         32* 1* 20 976 N         103* 22* 28 539 W           1,200.0         0.00         0.00         1,300.0         0.00         0.03         373 194 76         833 303 18         32* 1* 20 976 N         103* 22* 28 539 W           1,400.0         0.00         1,600.0         0.00         373 194 76         833 303 18         32* 1* 20 976 N         103* 22* 28 539 W           1,600.0         0.00         1,600.0         0.0         373 194 76         833 303 18         32* 1* 20 976 N         103* 23* 28 539 W           1,600.0         0.00         1,600.0<										
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800         0.00         800.0         0.00         373,194.76         833,303,18         32* 1* 20,376.N         102* 27:28,539.W           1,000.0         0.00         0.00         1,000.0         0.00         1,000.0         0.00         1,000.0         0.00         1,000.0         0.00         1,000.0         0.00         1,000.0         0.00         1,000.0         0.00         1,000.0         0.00         1,000.0         0.00         373,194.76         833,303,18         32* 1* 20,376.N         103* 27:28,539.W           1,200.0         0.00         0.00         1,200.0         0.00         0.00         373,194.76         833,303,18         32* 1* 20,376.N         103* 27:28,539.W           1,400.0         0.00         0.00         0.00         373,194.76         833,303,18         32* 1* 20,376.N         103* 27:28,539.W           1,600.0         0.00         0.00         0.00         0.00         373,194.76         833,303,18         32* 1* 20,376.N         103* 27:28,253.9W           1,800.0         0.00         0.00         0.00         0.00         373,194.76         833,303,18         32* 1* 20,376.N         103* 27:28,253.9W           1,900.0         0.00         0.00         0.00         0.00         0.00 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>										
900.0 0.00 0.00 900.0 0.0 373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 1,000 0.00 0.00 1,000 0.00 0.00 373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 1,200.0 0.00 0.00 1,200.0 0.0 0.0 373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 1,300.0 0.00 0.00 1,200.0 0.0 0.0373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 1,400.0 0.00 0.00 1,400.0 0.0 0.0373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 1,600.0 0.00 0.00 1,600.0 0.0 0.0373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 1,600.0 0.00 0.00 1,600.0 0.0 0.0373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 1,600.0 0.00 0.00 1,600.0 0.0 0.0373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 1,600.0 0.00 0.00 1,600.0 0.0 0.0373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 2,000.0 0.00 0.00 1,800.0 0.0 0.0373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 2,000.0 0.00 0.00 1,800.0 0.0 0.0373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 2,000.0 0.00 0.00 1,800.0 0.0 0.0373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 2,000.0 0.00 0.00 2,000.0 0.0 0.0373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 2,000.0 0.00 300 0.00 0.00 373,194.76 833,303.18 32° 1° 20.976 N 133° 23° 28.539 W 2,000.0 0.76 311.81 2,000 0.7 0.8 373,195.47 833,303.18 32° 1° 20.976 N 103° 23° 28.539 W 2,000.0 0.76 311.81 2,000 0.2 52.8 373,195.47 833,304.43 22° 1° 20.976 N 103° 23° 28.542 W 2,000.0 0.76 311.81 2,000 0.2 52.8 373,195.47 833,304.43 22° 1° 20.978 N 103° 23° 28.540 W 2,000.0 0.76 311.81 2,000 0.4 -3.8 373,195.47 833,304.43 22° 1° 20.981 N 103° 23° 28.540 W 2,000.0 0.76 311.81 2,000 0.4 -3.8 373,195.47 833,304.43 22° 1° 20.981 N 103° 23° 28.560 W 2,000.0 0.76 311.81 2,099.9 51.6 373,204.58 33,296.43 32° 1° 20.981 N 103° 23° 28.560 W 2,000.0 0.76 311.81 2,099.9 51.6 373,204.58 33,296.43 32° 1° 21.010 N 103° 23° 28.560 W 3,000.0 0.76 311.81 3,099.9 1.3 -1.76 373,200.56 833,296.43 32° 1° 1.010 N 103° 23° 28.560 W 3,000.0 0.76 311.81 3,999.9 1.3 -1.65 373,201.58 333,296										
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										103° 23' 28.539 W
1,500.0         0.00         1,500.0         0.00         1,500.0         0.00         1,500.0         0.00         1,600.0         0.00         1,600.0         0.00         1,600.0         0.00         1,700.0         0.00         1,700.0         0.00         1,700.0         0.00         1,700.0         0.00         1,700.0         0.00         1,700.0         0.00         1,700.0         0.00         0.00         373,194.76         833,303.18         32' 1' 20.976 N         103' 23' 28.539 W           1,800.0         0.00         0.00         1,800.0         0.0         0.03' 73,194.76         833,303.18         32' 1' 20.976 N         103' 23' 28.539 W           2,000.0         0.00         2,000.0         0.00         0.00         373,194.76         833,303.18         32' 1' 20.976 N         103' 23' 28.539 W           2,000.0         0.76         311.81         2,000.0         0.76         311.81         2,000.0         76         311.81         2,000.0         1.6         -1.8         373,194.72         833,300.41         32' 1' 20.983 N         103' 23' 28.564 W           2,000.0         0.76         311.81         2,000.0         3.4         3.43' 196.3         833,301.40         32' 1' 20.972 N         103' 23' 28.564 W         2''1 20.092 N<			0.00			0.0		833,303.18	32° 1' 20.976 N	103° 23' 28.539 W
			0.00			0.0			32° 1' 20.976 N	103° 23' 28.539 W
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1,600.0	0.00	0.00		0.0	0.0	373,194.76	833,303.18	32° 1' 20.976 N	103° 23' 28.539 W
1900.0         0.00         1900.0         0.00         373,194.76         833,303.18         32° 1° 20.976 N         103° 23° 28.539 W           2,000.0         0.00         0.00         373,194.76         833,303.18         32° 1° 20.976 N         103° 23° 28.539 W           Start Build 2.00         1         1         2         0.00         0.76         311.81         2,007.8         0.2         -0.2         373,194.92         833,302.38         32° 1° 20.976 N         103° 23° 28.549 W           2,000.0         0.76         311.81         2,000.0         1.6         -1.8         373,196.47         833,301.40         32° 1° 20.993 N         103° 23° 28.564 W           2,000.0         0.76         311.81         2,000.0         2.5         -2.8         373,197.23         833,301.40         32° 1° 21.098 N         103° 23° 28.561 W           2,000.0         0.76         311.81         2,000.0         3.4         -3.8         373,197.23         833,294.44         32° 1° 21.010 N         103° 23° 28.563 W           2,500.0         0.76         311.81         2,500.0         4.2         4.7         737,197.23         833,294.44         32° 1° 21.010 N         103° 23° 28.563 W           2,600.0         0.76         311.81         2,599.9<			0.00		0.0	0.0			32° 1' 20.976 N	103° 23' 28.539 W
2,000.0         0.00         2,000.0         0.0         373,194.76         833,303.18         32° 1' 20.976 N         103° 23' 28.539 W           Start Build 2.00         0.76         311.81         2,037.8         0.76         311.81         2,000.0         0.76         311.81         2,000.0         0.76         311.81         2,000.0         0.76         311.81         2,000.0         0.76         311.81         2,000.0         0.76         311.81         2,000.0         103° 23' 28.549 W           2,000.0         0.76         311.81         2,000.0         16         -1.8         373,196.37         833,300.41         32° 1' 20.998 N         103° 23' 28.560 W           2,000.0         0.76         311.81         2,000.0         3.4         -3.8         373,196.31         833,300.41         32° 1' 21.001 N         103° 23' 28.560 W           2,000.0         0.76         311.81         2,600.0         3.4         -3.8         373,198.11         833,209.43         32° 1' 21.001 N         103° 23' 28.560 W           2,000.0         0.76         311.81         2,699.9         5.1         -5.7         373,198.47         833,297.46         32° 1' 21.027 N         103° 23' 28.650 W           2,000.0         0.76         311.81         2,69	1,800.0	0.00	0.00	1,800.0	0.0	0.0	373,194.76	833,303.18	32° 1' 20.976 N	103° 23' 28.539 W
Start Build 2.00         2,037.8         0.76         311.81         2,037.8         0.2         -0.2         373,194.92         833,302.99         32° 1° 20.978 N         103° 23° 28.542 W           Start S781.2 hold at 2037.8 MD         2,100.0         0.76         311.81         2,100.0         0.76         311.81         2,200.0         16         -1.8         373,195.47         833,302.38         32° 1° 20.983 N         103° 23° 28.549 W           2,000         0.76         311.81         2,200.0         1.6         -1.8         373,196.35         833,301.40         32° 1° 20.983 N         103° 23° 28.561 W           2,000.0         0.76         311.81         2,400.0         3.4         -3.8         373,198.31         833,299.43         32° 1° 21.001 N         103° 23° 28.561 W           2,500.0         0.76         311.81         2,509.9         5.1         -5.7         373,198.91         833,297.46         32° 1° 21.027 N         103° 23° 28.563 W           2,600.0         0.76         311.81         2,699.9         6.0         -6.7         373,201.63         833,292.45         32° 1° 21.027 N         103° 23° 28.651 W           2,800.0         0.76         311.81         2,999.9         8.6         -9.7         373,201.63         833,292.451 <td>1,900.0</td> <td>0.00</td> <td>0.00</td> <td>1,900.0</td> <td>0.0</td> <td>0.0</td> <td>373,194.76</td> <td>833,303.18</td> <td>32° 1' 20.976 N</td> <td>103° 23' 28.539 W</td>	1,900.0	0.00	0.00	1,900.0	0.0	0.0	373,194.76	833,303.18	32° 1' 20.976 N	103° 23' 28.539 W
2,037.8         0.76         311.81         2,037.8         0.2         -0.2         373,194.92         833,302.99         32° 1' 20.978 N         103° 23' 28.542 W           Start 8781.2 hold at 2037.8 MD         0         0         0.76         311.81         2,100.0         0.76         311.81         2,200.0         0.76         311.81         2,200.0         1.6         -1.8         373,196.35         833,301.40         32° 1' 20.992 N         103° 23' 28.561 W           2,000.0         0.76         311.81         2,200.0         1.6         -1.8         373,196.35         833,301.40         32° 1' 21.01 N         103° 23' 28.561 W           2,000.0         0.76         311.81         2,000.0         3.4         -3.8         373,198.11         833,302.99 43         32° 1' 21.01 N         103° 23' 28.571 W           2,000.0         0.76         311.81         2,509.0         4.2         4.7         373,198.91         833,298.44         32° 1' 21.01 N         103° 23' 28.571 W           2,600.0         0.76         311.81         2,599.9         5.1         -5.7         373,206.47         32° 1' 21.05 N         103° 23' 28.651 W           2,000.0         0.76         311.81         2,999.9         6.9         -7.7         373,201.63	2,000.0	0.00	0.00	2,000.0	0.0	0.0	373,194.76	833,303.18	32° 1' 20.976 N	103° 23' 28.539 W
Start 8781.2 hold at 2037.8 MD           2,100.0         0.76         311.81         2,100.0         0.76         311.81         2,200.0         1.6         -1.8         373,195.47         833,302.38         32° 1' 20.983 N         103° 23' 28 549 W           2,200.0         0.76         311.81         2,300.0         2.5         -2.8         373,197.23         833,301.40         32° 1' 20.992 N         103° 23' 28 559 W           2,400.0         0.76         311.81         2,400.0         3.4         -3.8         373,198.41         833,299.43         32° 1' 21.001 N         103° 23' 28 559 W           2,500.0         0.76         311.81         2,599.9         5.1         -5.7         373,199.87         833,297.46         32° 1' 21.007 N         103° 23' 28 650 W           2,700.0         0.76         311.81         2,699.9         6.0         -6.7         373,199.87         833,295.47         32° 1' 21.027 N         103° 23' 28 651 W           2,800.0         0.76         311.81         2,699.9         7.8         -8.7         373,202.57         833,295.49         32° 1' 21.025 N         103° 23' 28.651 W           3,000.0         0.76         311.81         2,999.9         8.6         -9.7         373,202.51         833,291.55 <td>Start B</td> <td>uild 2.00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Start B	uild 2.00								
2,100.0       0.76       311.81       2,100.0       0.7       -0.8       373,195.47       833,302.38       32° 1' 20.983 N       103' 23' 28.569 W         2,200.0       0.76       311.81       2,200.0       1.6       -1.8       373,197.23       833,301.40       32° 1' 20.992 N       103' 23' 28.569 W         2,400.0       0.76       311.81       2,400.0       3.4       -3.8       373,197.23       833,300.41       32° 1' 21.001 N       103' 23' 28.563 W         2,500.0       0.76       311.81       2,500.0       4.2       -4.7       373,198.11       833,297.46       32° 1' 21.010 N       103' 23' 28.583 W         2,500.0       0.76       311.81       2,509.9       5.1       -5.7       373,199.87       833,297.46       32° 1' 21.010 N       103' 23' 28.665 W         2,700.0       0.76       311.81       2,699.9       6.0       -6.7       373,200.75       833,295.49       32° 1' 21.065 N       103' 23' 28.665 W         2,900.0       0.76       311.81       2,799.9       6.9       -7.7       373,202.51       833,291.51       32' 1' 21.065 N       103' 23' 28.665 W         3,000.0       0.76       311.81       3,099.9       9.5       -10.6       373,202.51       833,291.55       3	2,037.8	0.76	311.81	2,037.8	0.2	-0.2	373,194.92	833,302.99	32° 1' 20.978 N	103° 23' 28.542 W
2,200.0       0.76       311.81       2,200.0       1.6       -1.8       373,196.35       833,301.40       32° 1' 20.992 N       103° 23' 28.561 W         2,300.0       0.76       311.81       2,400.0       2.5       -2.8       373,197.23       833,301.40       32° 1' 21.001 N       103° 23' 28.571 W         2,400.0       0.76       311.81       2,600.0       4.2       -4.7       373,198.11       833,299.43       32° 1' 21.019 N       103° 23' 28.583 W         2,600.0       0.76       311.81       2,599.9       5.1       -5.7       373,198.99       833,297.46       32° 1' 21.027 N       103° 23' 28.662 W         2,700.0       0.76       311.81       2,799.9       6.9       -7.7       373,201.53       833,295.49       32° 1' 21.045 N       103° 23' 28.662 W         2,900.0       0.76       311.81       2,799.9       8.6       -9.7       373,201.51       833,294.51       32° 1' 21.045 N       103° 23' 28.662 W         3,000.0       0.76       311.81       2,999.9       8.6       -9.7       373,202.51       833,291.55       32° 1' 21.061 N       103° 23' 28.662 W         3,000.0       0.76       311.81       3,199.9       10.4       -11.6       373,204.28       833,291.55	Start 8	781.2 hold a	t 2037.8 MD							
2,300.0       0.76       311.81       2,300.0       2.5       -2.8       373,197.23       833,300.41       32° 1° 21.001 N       103° 23° 28.571 W         2,400.0       0.76       311.81       2,400.0       3.4       -3.8       373,198.91       833,299.43       32° 1° 21.001 N       103° 23° 28.583 W         2,500.0       0.76       311.81       2,500.0       4.2       4.7       373,199.97       833,294.43       32° 1° 21.001 N       103° 23° 28.594 W         2,600.0       0.76       311.81       2,699.9       6.0       -6.7       373,200.75       833,296.47       32° 1° 21.036 N       103° 23° 28.661 W         2,800.0       0.76       311.81       2,699.9       6.9       -7.7       373,200.51       833,294.51       32° 1° 21.064 N       103° 23° 28.663 W         3,000.0       0.76       311.81       2,999.9       8.6       -9.7       373,202.51       833,293.52       32° 1° 21.063 N       103° 23° 28.663 W         3,000.0       0.76       311.81       3,099.9       9.5       -10.6       373,204.28       833,293.52       32° 1° 21.063 N       103° 23° 28.663 W         3,000.0       0.76       311.81       3,099.9       1.2       -13.6       373,206.04       833,280.55       3			311.81							103° 23' 28.549 W
2,400.0       0.76       311.81       2,400.0       3.4       -3.8       373,198.11       833,299.43       32° 1' 21.010 N       103° 23' 28.583 W         2,500.0       0.76       311.81       2,500.0       4.2       4.7       373,198.99       833,296.44       32° 1' 21.019 N       103° 23' 28.584 W         2,600.0       0.76       311.81       2,599.9       5.1       -5.7       373,198.99       833,297.46       32° 1' 21.027 N       103° 23' 28.665 W         2,600.0       0.76       311.81       2,699.9       6.0       -6.7       373,200.75       833,296.47       32° 1' 21.036 N       103° 23' 28.668 W         2,900.0       0.76       311.81       2,899.9       7.8       -8.7       373,202.51       833,292.451       32° 1' 21.063 N       103° 23' 28.663 W         3,000.0       0.76       311.81       2,899.9       7.8       -8.7       373,202.51       833,292.54       32° 1' 21.063 N       103° 23' 28.667 W         3,000.0       0.76       311.81       3,099.9       9.5       -10.6       373,204.28       833,291.55       32° 1' 21.063 N       103° 23' 28.667 W         3,000.0       0.76       311.81       3,099.9       11.3       -12.6       373,206.48       833,281.55 <td< td=""><td>2,200.0</td><td>0.76</td><td>311.81</td><td>2,200.0</td><td>1.6</td><td></td><td>373,196.35</td><td>833,301.40</td><td>32° 1' 20.992 N</td><td>103° 23' 28.560 W</td></td<>	2,200.0	0.76	311.81	2,200.0	1.6		373,196.35	833,301.40	32° 1' 20.992 N	103° 23' 28.560 W
2,500.0       0.76       311.81       2,500.0       4.2       4.7       373,198.99       833,298.44       32° 1' 21.019 N       103° 23' 28.594 W         2,600.0       0.76       311.81       2,599.9       5.1       -5.7       373,199.87       833,297.46       32° 1' 21.017 N       103° 23' 28.605 W         2,700.0       0.76       311.81       2,699.9       6.0       -6.7       373,200.75       833,296.47       32° 1' 21.045 N       103° 23' 28.617 W         2,800.0       0.76       311.81       2,799.9       6.9       -7.7       373,201.63       833,294.51       32° 1' 21.045 N       103° 23' 28.628 W         3,000.0       0.76       311.81       2,999.9       8.6       -9.7       373,203.39       833,291.55       32° 1' 21.061 N       103° 23' 28.662 W         3,000.0       0.76       311.81       3,099.9       9.5       -10.6       373,204.28       833,291.55       32° 1' 21.080 N       103° 23' 28.662 W         3,000.0       0.76       311.81       3,099.9       10.4       -11.6       373,206.16       833,291.55       32° 1' 21.080 N       103° 23' 28.663 W         3,000.0       0.76       311.81       3,199.9       13.0       -14.6       373,206.92       833,289.59 <t< td=""><td></td><td></td><td>311.81</td><td></td><td></td><td></td><td></td><td></td><td>32° 1' 21.001 N</td><td>103° 23' 28.571 W</td></t<>			311.81						32° 1' 21.001 N	103° 23' 28.571 W
2,600.0       0.76       311.81       2,599.9       5.1       -5.7       373,199.87       833,297.46       32° 1' 21.027 N       103° 23' 28.605 W         2,700.0       0.76       311.81       2,699.9       6.0       -6.7       373,200.75       833,296.47       32° 1' 21.036 N       103° 23' 28.661 W         2,800.0       0.76       311.81       2,799.9       6.9       -7.7       373,201.63       833,295.49       32° 1' 21.045 N       103° 23' 28.638 W         3,000.0       0.76       311.81       2,999.9       8.6       -9.7       373,203.39       833,293.52       32° 1' 21.054 N       103° 23' 28.662 W         3,000.0       0.76       311.81       3,099.9       9.5       -10.6       373,204.28       833,292.54       32° 1' 21.063 N       103° 23' 28.662 W         3,200.0       0.76       311.81       3,099.9       10.4       -11.6       373,206.16       833,291.55       32° 1' 21.080 N       103° 23' 28.667 W         3,300.0       0.76       311.81       3,499.9       13.0       -14.6       373,206.92       833,280.57       32° 1' 21.080 N       103° 23' 28.669 W         3,600.0       0.76       311.81       3,499.9       13.0       -14.6       373,207.80       833,286.63										
2,700.0       0.76       311.81       2,699.9       6.0       -6.7       373,200.75       833,296.47       32° 1' 21.036 N       103° 23' 28.617 W         2,800.0       0.76       311.81       2,799.9       6.9       -7.7       373,201.63       833,295.49       32° 1' 21.045 N       103° 23' 28.628 W         2,900.0       0.76       311.81       2,899.9       7.8       -8.7       373,202.51       833,294.51       32° 1' 21.054 N       103° 23' 28.639 W         3,000.0       0.76       311.81       2,999.9       8.6       -9.7       373,203.39       833,293.52       32° 1' 21.054 N       103° 23' 28.663 W         3,100.0       0.76       311.81       3,099.9       9.5       -10.6       373,204.28       833,291.55       32° 1' 21.071 N       103° 23' 28.667 W         3,200.0       0.76       311.81       3,199.9       10.4       -11.6       373,206.04       833,280.57       32° 1' 21.080 N       103° 23' 28.667 W         3,400.0       0.76       311.81       3,499.9       13.0       -14.6       373,206.02       833,286.63       32° 1' 21.108 N       103° 23' 28.667 W         3,600.0       0.76       311.81       3,699.9       13.9       -15.6       373,207.80       833,286.63										
2,800.0       0.76       311.81       2,799.9       6.9       -7.7       373,201.63       833,295.49       32° 1' 21.045 N       103° 23' 28.628 W         2,900.0       0.76       311.81       2,899.9       7.8       -8.7       373,202.51       833,293.52       32° 1' 21.045 N       103° 23' 28.639 W         3,000.0       0.76       311.81       2,999.9       8.6       -9.7       373,203.39       833,293.52       32° 1' 21.063 N       103° 23' 28.661 W         3,100.0       0.76       311.81       3,099.9       9.5       -10.6       373,204.28       833,290.57       32° 1' 21.080 N       103° 23' 28.662 W         3,200.0       0.76       311.81       3,199.9       10.4       -11.6       373,205.16       833,290.57       32° 1' 21.080 N       103° 23' 28.662 W         3,300.0       0.76       311.81       3,299.9       11.3       -12.6       373,206.04       833,290.57       32° 1' 21.080 N       103° 23' 28.665 W         3,400.0       0.76       311.81       3,499.9       13.0       -14.6       373,206.88       833,281.62       32° 1' 21.080 N       103° 23' 28.707 W         3,600.0       0.76       311.81       3,699.9       13.9       -15.6       373,208.68       833,281.62										
2,900.0       0.76       311.81       2,899.9       7.8       -8.7       373,202.51       833,294.51       32° 1' 21.054 N       103° 23' 28.639 W         3,000.0       0.76       311.81       2,999.9       8.6       -9.7       373,203.39       833,293.52       32° 1' 21.063 N       103° 23' 28.661 W         3,100.0       0.76       311.81       3,099.9       9.5       -10.6       373,204.28       833,292.54       32° 1' 21.071 N       103° 23' 28.662 W         3,200.0       0.76       311.81       3,199.9       10.4       -11.6       373,206.04       833,291.55       32° 1' 21.089 N       103° 23' 28.665 W         3,400.0       0.76       311.81       3,399.9       12.2       -13.6       373,206.92       833,289.57       32° 1' 21.089 N       103° 23' 28.669 W         3,600.0       0.76       311.81       3,499.9       13.0       -14.6       373,207.80       833,286.63       32° 1' 21.107 N       103° 23' 28.707 W         3,600.0       0.76       311.81       3,699.9       14.8       -16.5       373,209.56       833,286.63       32° 1' 21.107 N       103° 23' 28.707 W         3,600.0       0.76       311.81       3,699.9       14.8       -16.5       373,209.56       833,286.63										
3,000.0       0.76       311.81       2,999.9       8.6       -9.7       373,203.39       833,293.52       32° 1' 21.063 N       103° 23' 28.651 W         3,100.0       0.76       311.81       3,099.9       9.5       -10.6       373,204.28       833,292.54       32° 1' 21.071 N       103° 23' 28.662 W         3,200.0       0.76       311.81       3,199.9       10.4       -11.6       373,205.16       833,291.55       32° 1' 21.080 N       103° 23' 28.663 W         3,300.0       0.76       311.81       3,299.9       11.3       -12.6       373,206.04       833,290.57       32° 1' 21.089 N       103° 23' 28.668 W         3,400.0       0.76       311.81       3,999.9       12.2       -13.6       373,207.80       833,289.59       32° 1' 21.07 N       103° 23' 28.696 W         3,500.0       0.76       311.81       3,699.9       13.0       -14.6       373,207.80       833,286.60       32° 1' 21.107 N       103° 23' 28.707 W         3,600.0       0.76       311.81       3,699.9       14.8       -16.5       373,208.68       833,286.63       32° 1' 21.124 N       103° 23' 28.730 W       3,800.0       0.76       311.81       3,699.8       15.7       -17.5       373,210.44       833,286.65       32° 1' 21										
3,100.0       0.76       311.81       3,099.9       9.5       -10.6       373,204.28       833,292.54       32° 1' 21.071 N       103° 23' 28.662 W         3,200.0       0.76       311.81       3,199.9       10.4       -11.6       373,205.16       833,291.55       32° 1' 21.071 N       103° 23' 28.662 W         3,300.0       0.76       311.81       3,299.9       11.3       -12.6       373,206.04       833,290.57       32° 1' 21.089 N       103° 23' 28.685 W         3,400.0       0.76       311.81       3,399.9       12.2       -13.6       373,206.92       833,289.59       32° 1' 21.098 N       103° 23' 28.696 W         3,500.0       0.76       311.81       3,499.9       13.0       -14.6       373,207.80       833,288.60       32° 1' 21.107 N       103° 23' 28.707 W         3,600.0       0.76       311.81       3,699.9       13.9       -15.6       373,208.68       833,287.62       32° 1' 21.15 N       103° 23' 28.719 W         3,700.0       0.76       311.81       3,699.9       14.8       -16.5       373,209.56       833,286.63       32° 1' 21.124 N       103° 23' 28.73 W         3,800.0       0.76       311.81       3,699.8       15.7       -17.5       373,210.44       833,286.65										
3,200.0       0.76       311.81       3,199.9       10.4       -11.6       373,205.16       833,291.55       32° 1' 21.080 N       103° 23' 28.673 W         3,300.0       0.76       311.81       3,299.9       11.3       -12.6       373,206.04       833,290.57       32° 1' 21.080 N       103° 23' 28.685 W         3,400.0       0.76       311.81       3,399.9       12.2       -13.6       373,206.92       833,289.59       32° 1' 21.098 N       103° 23' 28.696 W         3,500.0       0.76       311.81       3,499.9       13.0       -14.6       373,207.80       833,288.60       32° 1' 21.098 N       103° 23' 28.707 W         3,600.0       0.76       311.81       3,699.9       13.9       -15.6       373,208.68       833,287.62       32° 1' 21.115 N       103° 23' 28.719 W         3,700.0       0.76       311.81       3,699.9       14.8       -16.5       373,209.56       833,286.63       32° 1' 21.124 N       103° 23' 28.730 W         3,800.0       0.76       311.81       3,699.8       15.7       -17.5       373,210.44       833,286.65       32° 1' 21.13N N       103° 23' 28.730 W         3,900.0       0.76       311.81       3,899.8       16.6       -18.5       373,210.44       833,286.65 </td <td></td>										
3,300.0       0.76       311.81       3,299.9       11.3       -12.6       373,206.04       833,290.57       32° 1' 21.089 N       103° 23' 28.685 W         3,400.0       0.76       311.81       3,399.9       12.2       -13.6       373,206.92       833,289.59       32° 1' 21.098 N       103° 23' 28.685 W         3,500.0       0.76       311.81       3,499.9       13.0       -14.6       373,207.80       833,288.60       32° 1' 21.107 N       103° 23' 28.707 W         3,600.0       0.76       311.81       3,599.9       13.9       -15.6       373,208.68       833,287.62       32° 1' 21.107 N       103° 23' 28.707 W         3,700.0       0.76       311.81       3,699.9       14.8       -16.5       373,209.56       833,286.63       32° 1' 21.124 N       103° 23' 28.730 W         3,800.0       0.76       311.81       3,799.8       15.7       -17.5       373,210.44       833,285.65       32° 1' 21.142 N       103° 23' 28.753 W         3,900.0       0.76       311.81       3,999.8       17.4       -19.5       373,212.20       833,283.68       32° 1' 21.151 N       103° 23' 28.764 W         4,000.0       0.76       311.81       4,099.8       17.4       -19.5       373,213.08       833,281.63 </td <td></td>										
3,400.0       0.76       311.81       3,399.9       12.2       -13.6       373,206.92       833,289.59       32° 1' 21.098 N       103° 23' 28.696 W         3,500.0       0.76       311.81       3,499.9       13.0       -14.6       373,207.80       833,288.60       32° 1' 21.107 N       103° 23' 28.707 W         3,600.0       0.76       311.81       3,599.9       13.9       -15.6       373,208.68       833,287.62       32° 1' 21.115 N       103° 23' 28.719 W         3,700.0       0.76       311.81       3,699.9       14.8       -16.5       373,209.56       833,286.63       32° 1' 21.124 N       103° 23' 28.730 W         3,800.0       0.76       311.81       3,699.9       14.8       -16.5       373,210.44       833,285.65       32° 1' 21.124 N       103° 23' 28.730 W         3,900.0       0.76       311.81       3,799.8       15.7       -17.5       373,211.32       833,284.66       32° 1' 21.142 N       103° 23' 28.753 W         4,000.0       0.76       311.81       3,999.8       17.4       -19.5       373,213.08       833,282.70       32° 1' 21.151 N       103° 23' 28.764 W         4,100.0       0.76       311.81       4,999.8       17.4       -19.5       373,213.08       833,281.71 </td <td></td>										
3,500.0       0.76       311.81       3,499.9       13.0       -14.6       373,207.80       833,288.60       32° 1' 21.107 N       103° 23' 28.707 W         3,600.0       0.76       311.81       3,599.9       13.9       -15.6       373,207.80       833,288.60       32° 1' 21.107 N       103° 23' 28.707 W         3,600.0       0.76       311.81       3,599.9       13.9       -15.6       373,208.68       833,287.62       32° 1' 21.115 N       103° 23' 28.719 W         3,700.0       0.76       311.81       3,699.9       14.8       -16.5       373,209.56       833,286.63       32° 1' 21.124 N       103° 23' 28.730 W         3,800.0       0.76       311.81       3,799.8       15.7       -17.5       373,210.44       833,285.65       32° 1' 21.133 N       103° 23' 28.730 W         3,900.0       0.76       311.81       3,899.8       16.6       -18.5       373,211.32       833,284.66       32° 1' 21.142 N       103° 23' 28.753 W         4,000.0       0.76       311.81       3,999.8       17.4       -19.5       373,213.08       833,283.68       32° 1' 21.151 N       103° 23' 28.764 W         4,100.0       0.76       311.81       4,199.8       19.2       -21.5       373,213.08       833,281.71 </td <td></td>										
3,600.0       0.76       311.81       3,599.9       13.9       -15.6       373,208.68       833,287.62       32° 1' 21.115 N       103° 23' 28.719 W         3,700.0       0.76       311.81       3,699.9       14.8       -16.5       373,209.56       833,286.63       32° 1' 21.115 N       103° 23' 28.719 W         3,800.0       0.76       311.81       3,799.8       15.7       -17.5       373,210.44       833,285.65       32° 1' 21.133 N       103° 23' 28.730 W         3,900.0       0.76       311.81       3,799.8       15.7       -17.5       373,210.44       833,285.65       32° 1' 21.133 N       103° 23' 28.730 W         3,900.0       0.76       311.81       3,899.8       16.6       -18.5       373,211.32       833,283.66       32° 1' 21.142 N       103° 23' 28.753 W         4,000.0       0.76       311.81       3,999.8       17.4       -19.5       373,212.20       833,283.68       32° 1' 21.151 N       103° 23' 28.764 W         4,100.0       0.76       311.81       4,099.8       18.3       -20.5       373,213.08       833,281.71       32° 1' 21.159 N       103° 23' 28.764 W         4,300.0       0.76       311.81       4,199.8       19.2       -21.5       373,213.08       833,281.71 </td <td></td>										
3,700.0       0.76       311.81       3,699.9       14.8       -16.5       373,209.56       833,286.63       32° 1' 21.124 N       103° 23' 28.730 W         3,800.0       0.76       311.81       3,799.8       15.7       -17.5       373,210.44       833,285.65       32° 1' 21.133 N       103° 23' 28.730 W         3,900.0       0.76       311.81       3,799.8       15.7       -17.5       373,210.44       833,285.65       32° 1' 21.133 N       103° 23' 28.741 W         3,900.0       0.76       311.81       3,899.8       16.6       -18.5       373,211.32       833,284.66       32° 1' 21.142 N       103° 23' 28.753 W         4,000.0       0.76       311.81       3,999.8       17.4       -19.5       373,212.20       833,283.68       32° 1' 21.151 N       103° 23' 28.764 W         4,100.0       0.76       311.81       4,099.8       18.3       -20.5       373,213.08       833,282.70       32° 1' 21.159 N       103° 23' 28.764 W         4,200.0       0.76       311.81       4,199.8       19.2       -21.5       373,213.08       833,281.71       32° 1' 21.159 N       103° 23' 28.776 W         4,300.0       0.76       311.81       4,299.8       20.1       -22.5       373,213.48       833,280.73 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>,</td> <td></td> <td></td>								,		
3,800.0         0.76         311.81         3,799.8         15.7         -17.5         373,210.44         833,285.65         32° 1' 21.133 N         103° 23' 28.741 W           3,900.0         0.76         311.81         3,899.8         16.6         -18.5         373,211.32         833,285.65         32° 1' 21.133 N         103° 23' 28.753 W           4,000.0         0.76         311.81         3,999.8         17.4         -19.5         373,212.20         833,283.68         32° 1' 21.151 N         103° 23' 28.764 W           4,100.0         0.76         311.81         3,999.8         17.4         -19.5         373,213.08         833,282.70         32° 1' 21.151 N         103° 23' 28.764 W           4,100.0         0.76         311.81         4,099.8         18.3         -20.5         373,213.08         833,282.70         32° 1' 21.159 N         103° 23' 28.764 W           4,200.0         0.76         311.81         4,199.8         19.2         -21.5         373,213.08         833,282.70         32° 1' 21.159 N         103° 23' 28.776 W           4,300.0         0.76         311.81         4,299.8         20.1         -22.5         373,213.96         833,280.73         32° 1' 21.177 N         103° 23' 28.798 W           4,400.0         0.76										
3,900.0         0.76         311.81         3,899.8         16.6         -18.5         373,211.32         833,284.66         32° 1' 21.142 N         103° 23' 28.753 W           4,000.0         0.76         311.81         3,999.8         17.4         -19.5         373,212.20         833,283.68         32° 1' 21.151 N         103° 23' 28.753 W           4,000.0         0.76         311.81         3,999.8         17.4         -19.5         373,212.20         833,283.68         32° 1' 21.151 N         103° 23' 28.764 W           4,100.0         0.76         311.81         4,099.8         18.3         -20.5         373,213.08         833,282.70         32° 1' 21.159 N         103° 23' 28.776 W           4,200.0         0.76         311.81         4,199.8         19.2         -21.5         373,213.96         833,281.71         32° 1' 21.168 N         103° 23' 28.787 W           4,300.0         0.76         311.81         4,299.8         20.1         -22.5         373,213.96         833,280.73         32° 1' 21.177 N         103° 23' 28.798 W           4,400.0         0.76         311.81         4,399.8         21.0         -23.4         373,215.72         833,279.74         32° 1' 21.177 N         103° 23' 28.810 W           4,500.0         0.76									32° 1' 21 133 N	
4,000.0         0.76         311.81         3,999.8         17.4         -19.5         373,212.20         833,283.68         32° 1' 21.151 N         103° 23' 28.764 W           4,100.0         0.76         311.81         4,099.8         18.3         -20.5         373,213.08         833,283.68         32° 1' 21.151 N         103° 23' 28.764 W           4,200.0         0.76         311.81         4,099.8         18.3         -20.5         373,213.08         833,282.70         32° 1' 21.159 N         103° 23' 28.766 W           4,200.0         0.76         311.81         4,199.8         19.2         -21.5         373,213.96         833,281.71         32° 1' 21.158 N         103° 23' 28.787 W           4,300.0         0.76         311.81         4,299.8         20.1         -22.5         373,213.96         833,280.73         32° 1' 21.177 N         103° 23' 28.787 W           4,400.0         0.76         311.81         4,299.8         20.1         -22.5         373,215.72         833,279.74         32° 1' 21.177 N         103° 23' 28.798 W           4,400.0         0.76         311.81         4,499.8         21.0         -23.4         373,215.72         833,279.74         32° 1' 21.195 N         103° 23' 28.821 W           4,500.0         0.76										
4,100.0         0.76         311.81         4,099.8         18.3         -20.5         373,213.08         833,282.70         32° 1' 21.159 N         103° 23' 28.776 W           4,200.0         0.76         311.81         4,199.8         19.2         -21.5         373,213.08         833,282.70         32° 1' 21.159 N         103° 23' 28.776 W           4,300.0         0.76         311.81         4,199.8         19.2         -21.5         373,213.96         833,281.71         32° 1' 21.168 N         103° 23' 28.787 W           4,300.0         0.76         311.81         4,299.8         20.1         -22.5         373,214.84         833,280.73         32° 1' 21.177 N         103° 23' 28.798 W           4,400.0         0.76         311.81         4,399.8         21.0         -23.4         373,215.72         833,279.74         32° 1' 21.176 N         103° 23' 28.810 W           4,500.0         0.76         311.81         4,499.8         21.8         -24.4         373,216.60         833,278.76         32° 1' 21.195 N         103° 23' 28.821 W           4,600.0         0.76         311.81         4,599.8         22.7         -25.4         373,217.48         833,277.77         32° 1' 21.203 N         103° 23' 28.832 W										
4,200.0         0.76         311.81         4,199.8         19.2         -21.5         373,213.96         833,281.71         32° 1' 21.168 N         103° 23' 28.787 W           4,300.0         0.76         311.81         4,299.8         20.1         -22.5         373,214.84         833,280.73         32° 1' 21.177 N         103° 23' 28.787 W           4,400.0         0.76         311.81         4,299.8         20.1         -22.5         373,214.84         833,280.73         32° 1' 21.177 N         103° 23' 28.798 W           4,400.0         0.76         311.81         4,399.8         21.0         -23.4         373,215.72         833,279.74         32° 1' 21.186 N         103° 23' 28.810 W           4,500.0         0.76         311.81         4,499.8         21.8         -24.4         373,216.60         833,278.76         32° 1' 21.195 N         103° 23' 28.821 W           4,600.0         0.76         311.81         4,599.8         22.7         -25.4         373,217.48         833,277.77         32° 1' 21.203 N         103° 23' 28.832 W										
4,300.0         0.76         311.81         4,299.8         20.1         -22.5         373,214.84         833,280.73         32° 1' 21.177 N         103° 23' 28.798 W           4,400.0         0.76         311.81         4,399.8         21.0         -23.4         373,215.72         833,279.74         32° 1' 21.177 N         103° 23' 28.798 W           4,500.0         0.76         311.81         4,499.8         21.8         -24.4         373,215.72         833,279.74         32° 1' 21.186 N         103° 23' 28.810 W           4,600.0         0.76         311.81         4,499.8         21.8         -24.4         373,216.60         833,278.76         32° 1' 21.195 N         103° 23' 28.821 W           4,600.0         0.76         311.81         4,599.8         22.7         -25.4         373,217.48         833,277.77         32° 1' 21.203 N         103° 23' 28.832 W										
4,400.0         0.76         311.81         4,399.8         21.0         -23.4         373,215.72         833,279.74         32° 1' 21.186 N         103° 23' 28.810 W           4,500.0         0.76         311.81         4,499.8         21.8         -24.4         373,215.72         833,278.76         32° 1' 21.186 N         103° 23' 28.810 W           4,600.0         0.76         311.81         4,499.8         21.8         -24.4         373,216.60         833,278.76         32° 1' 21.195 N         103° 23' 28.821 W           4,600.0         0.76         311.81         4,599.8         22.7         -25.4         373,217.48         833,277.77         32° 1' 21.203 N         103° 23' 28.832 W										
4,500.0         0.76         311.81         4,499.8         21.8         -24.4         373,216.60         833,278.76         32° 1' 21.195 N         103° 23' 28.821 W           4,600.0         0.76         311.81         4,599.8         22.7         -25.4         373,217.48         833,277.77         32° 1' 21.203 N         103° 23' 28.832 W										103° 23' 28.810 W
4,600.0 0.76 311.81 4,599.8 22.7 -25.4 373,217.48 833,277.77 32° 1' 21.203 N 103° 23' 28.832 W										103° 23' 28.821 W
										103° 23' 28.832 W
										103° 23' 28.844 W
										103° 23' 28.855 W
			311.81				373,220.12		32° 1' 21.230 N	103° 23' 28.866 W
5,000.0 0.76 311.81 4,999.7 26.2 -29.3 373,221.00 833,273.84 32° 1' 21.238 N 103° 23' 28.878 W	5,000.0	0.76	311.81	4,999.7	26.2	-29.3	373,221.00	833,273.84	32° 1' 21.238 N	103° 23' 28.878 W

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Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Company:	NEW MEXICO	TVD Reference:	KB @ 3205.0usft
Project:	(SP) LEA	MD Reference:	KB @ 3205.0usft
Site:	EL CAMPEON FED COM PROJECT	North Reference:	Grid
Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

#### Planned Survey

Measured Depth (usft)	Inclination		Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitudo
	(°)	(°)							Longitude
5,100.0		311.81	5,099.7	27.1	-30.3	373,221.88	833,272.85	32° 1' 21.247 N	103° 23' 28.889 W
5,200.0		311.81 311.81	5,199.7 5,299.7	28.0 28.9	-31.3 -32.3	373,222.76 373,223.64	833,271.87 833,270.88	32° 1' 21.256 N 32° 1' 21.265 N	103° 23' 28.900 W 103° 23' 28.912 W
5,300.0 5,400.0		311.81	5,399.7	20.9	-32.3	373,223.04	833,269.90	32° 1' 21.203 N 32° 1' 21.274 N	103° 23' 28.923 W
5,500.0		311.81	5,499.7	30.6	-34.3	373,225.40	833,268.92	32° 1' 21.282 N	103° 23' 28.934 W
5,600.0		311.81	5,599.7	31.5	-35.2	373,226.28	833,267.93	32° 1' 21.291 N	103° 23' 28.946 W
5,700.0		311.81	5,699.7	32.4	-36.2	373,227.16	833,266.95	32° 1' 21.300 N	103° 23' 28.957 W
5,800.0		311.81	5,799.7	33.3	-37.2	373,228.04	833,265.96	32° 1' 21.309 N	103° 23' 28.968 W
5,900.0	0.76	311.81	5,899.7	34.2	-38.2	373,228.92	833,264.98	32° 1' 21.318 N	103° 23' 28.980 W
6,000.0		311.81	5,999.7	35.0	-39.2	373,229.80	833,263.99	32° 1' 21.326 N	103° 23' 28.991 W
6,100.0		311.81	6,099.6	35.9	-40.2	373,230.68	833,263.01	32° 1' 21.335 N	103° 23' 29.002 W
6,200.0		311.81	6,199.6	36.8	-41.2	373,231.57	833,262.03	32° 1' 21.344 N	103° 23' 29.014 W
6,300.0		311.81	6,299.6	37.7	-42.1	373,232.45	833,261.04	32° 1' 21.353 N	103° 23' 29.025 W
6,400.0 6,500.0		311.81 311.81	6,399.6 6,499.6	38.6 39.4	-43.1 -44.1	373,233.33 373,234.21	833,260.06 833,259.07	32° 1' 21.362 N 32° 1' 21.370 N	103° 23' 29.036 W 103° 23' 29.048 W
6,600.0		311.81	6,599.6	40.3	-44.1	373,235.09	833,258.09	32° 1' 21.379 N	103° 23' 29.048 W
6,700.0		311.81	6,699.6	41.2	-46.1	373,235.97	833,257,10	32° 1' 21.388 N	103° 23' 29.070 W
6,800.0		311.81	6,799.6	42.1	-47.1	373,236.85	833,256.12	32° 1' 21.397 N	103° 23' 29.082 W
6,900.0		311.81	6,899.6	43.0	-48.0	373,237.73	833,255.14	32° 1' 21.406 N	103° 23' 29.093 W
7,000.0		311.81	6,999.6	43.8	-49.0	373,238.61	833,254.15	32° 1' 21.414 N	103° 23' 29.104 W
7,100.0	0.76	311.81	7,099.6	44.7	-50.0	373,239.49	833,253.17	32° 1' 21.423 N	103° 23' 29.116 W
7,200.0		311.81	7,199.5	45.6	-51.0	373,240.37	833,252.18	32° 1' 21.432 N	103° 23' 29.127 W
7,300.0		311.81	7,299.5	46.5	-52.0	373,241.25	833,251.20	32° 1' 21.441 N	103° 23' 29.138 W
7,400.0		311.81	7,399.5	47.4	-53.0	373,242.13	833,250.21	32° 1' 21.450 N	103° 23' 29.150 W
7,500.0		311.81	7,499.5	48.3	-53.9	373,243.01	833,249.23	32° 1' 21.458 N	103° 23' 29.161 W
7,600.0		311.81	7,599.5 7,699.5	49.1 50.0	-54.9 -55.9	373,243.89 373,244.77	833,248.25 833,247.26	32° 1' 21.467 N 32° 1' 21.476 N	103° 23' 29.173 W 103° 23' 29.184 W
7,700.0		311.81 311.81	7,099.5	50.0	-56.9	373,244.77	833,246.28	32° 1′ 21.470 N 32° 1′ 21.485 N	103° 23' 29.164 W
7,900.0		311.81	7,899.5	51.8	-57.9	373,246.53	833,245.29	32° 1' 21.494 N	103° 23' 29.207 W
8,000.0		311.81	7,999.5	52.7	-58.9	373,247.41	833,244.31	32° 1' 21.502 N	103° 23' 29.218 W
8,100.0		311.81	8,099.5	53.5	-59.9	373,248.29	833,243.32	32° 1' 21.511 N	103° 23' 29.229 W
8,200.0		311.81	8,199.5	54.4	-60.8	373,249.17	833,242.34	32° 1' 21.520 N	103° 23' 29.241 W
8,300.0	0.76	311.81	8,299.5	55.3	-61.8	373,250.05	833,241.36	32° 1' 21.529 N	103° 23' 29.252 W
8,400.0		311.81	8,399.4	56.2	-62.8	373,250.93	833,240.37	32° 1' 21.538 N	103° 23' 29.263 W
8,500.0		311.81	8,499.4	57.1	-63.8	373,251.81	833,239.39	32° 1' 21.546 N	103° 23' 29.275 W
8,600.0		311.81	8,599.4	57.9	-64.8	373,252.69	833,238.40	32° 1' 21.555 N	103° 23' 29.286 W
8,700.0		311.81	8,699.4	58.8	-65.8	373,253.57	833,237.42	32° 1' 21.564 N	103° 23' 29.297 W
8,800.0		311.81	8,799.4	59.7	-66.7 -67.7	373,254.45	833,236.43	32° 1' 21.573 N 32° 1' 21.582 N	103° 23' 29.309 W
8,900.0 9,000.0		311.81 311.81	8,899.4 8,999.4	60.6 61.5	-68.7	373,255.33 373,256.21	833,235.45 833,234.47	32° 1′ 21.502 N 32° 1′ 21.590 N	103° 23' 29.320 W 103° 23' 29.331 W
9,100.0		311.81	9,099.4	62.3	-69.7	373,257.09	833,233.48	32° 1' 21.599 N	103° 23' 29.343 W
9,200.0		311.81	9,199.4	63.2	-70.7	373,257.97	833,232.50	32° 1' 21.608 N	103° 23' 29.354 W
9,300.0		311.81	9,299.4	64.1	-71.7	373,258.85	833,231.51	32° 1' 21.617 N	103° 23' 29.365 W
9,400.0		311.81	9,399.4	65.0	-72.6	373,259.74	833,230.53	32° 1' 21.625 N	103° 23' 29.377 W
9,500.0	0.76	311.81	9,499.3	65.9	-73.6	373,260.62	833,229.55	32° 1' 21.634 N	103° 23' 29.388 W
9,600.0		311.81	9,599.3	66.7	-74.6	373,261.50	833,228.56	32° 1' 21.643 N	103° 23' 29.399 W
9,700.0		311.81	9,699.3	67.6	-75.6	373,262.38	833,227.58	32° 1' 21.652 N	103° 23' 29.411 W
9,800.0		311.81	9,799.3	68.5	-76.6	373,263.26	833,226.59	32° 1' 21.661 N	103° 23' 29.422 W
9,900.0		311.81	9,899.3	69.4	-77.6	373,264.14	833,225.61	32° 1' 21.669 N	103° 23' 29.433 W
10,000.0		311.81	9,999.3 10.000.3	70.3	-78.6	373,265.02	833,224.62 833,223.64	32° 1' 21.678 N 32° 1' 21.687 N	103° 23' 29.445 W
10,100.0		311.81 311.81	10,099.3 10,199.3	71.1 72.0	-79.5 -80.5	373,265.90 373,266.78	833,222.66	32° 1′ 21.696 N	103° 23' 29.456 W 103° 23' 29.467 W
10,300.0		311.81	10,199.3	72.9	-81.5	373,267.66	833,221.67	32° 1' 21.705 N	103° 23' 29.407 W
10,400.0		311.81	10,399.3	73.8	-82.5	373,268.54	833,220.69	32° 1' 21.713 N	103° 23' 29.490 W
10,500.0		311.81	10,499.3	74.7	-83.5	373,269.42	833,219.70	32° 1' 21.722 N	103° 23' 29.501 W

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COMPASS 5000.17 Build 03

Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Company:	NEW MEXICO	TVD Reference:	KB @ 3205.0usft
Project:	(SP) LEA	MD Reference:	KB @ 3205.0usft
Site:	EL CAMPEON FED COM PROJECT	North Reference:	Grid
Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

#### Planned Survey

Measured Depth	Inclination		Vertical Depth	+N/-S	+E/-W	Map Northing	Map Easting		
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude	Longitude
10,600.0	0.76	311.81	10,599.3	75.5	-84.5	373,270.30	833,218.72	32° 1' 21.731 N	103° 23' 29.513 W
10,700.0		311.81	10,699.2	76.4	-85.4	373,271.18	833,217.73	32° 1' 21.740 N	103° 23' 29.524 W
10,800.0		311.81	10,799.2	77.3	-86.4	373,272.06	833,216.75	32° 1' 21.749 N	103° 23' 29.535 W
10,819.1	0.76	311.81	10,818.3	77.5	-86.6	373,272.23	833,216.56	32° 1' 21.750 N	103° 23' 29.538 W
	LS 12.00 TF								
10,825.0		249.64	10,824.2	77.5	-86.7	373,272.24	833,216.50	32° 1' 21.750 N	103° 23' 29.538 W
10,850.0		189.32	10,849.2	76.7	-86.9	373,271.50	833,216.27	32° 1' 21.743 N	103° 23' 29.541 W
10,875.0		184.55 182.87	10,874.1	74.7 71.3	-87.1 -87.3	373,269.45	833,216.05	32° 1' 21.723 N 32° 1' 21.690 N	103° 23' 29.544 W 103° 23' 29.547 W
10,900.0 10,925.0		182.01	10,898.9 10,923.5	66.7	-87.5	373,266.10 373,261.45	833,215.84 833,215.64	32° 1' 21.644 N	103° 23' 29.549 W
10,920.0		181.48	10,923.3	60.8	-87.7	373,255.53	833,215.47	32° 1' 21.585 N	103° 23' 29.552 W
10,975.0		181.12	10,971.7	53.6	-87.9	373,248.34	833,215.31	32° 1' 21.514 N	103° 23' 29.555 W
11,000.0		180.87	10,995.2	45.2	-88.0	373,239.91	833,215.16	32° 1' 21.431 N	103° 23' 29.557 W
11,025.0		180.67	11,018.3	35.5	-88.1	373,230.27	833,215.03	32° 1' 21.335 N	103° 23' 29.560 W
11,050.0		180.51	11,040.8	24.7	-88.3	373,219.42	833,214.92	32° 1' 21.228 N	103° 23' 29.562 W
11,075.0		180.38	11,062.7	12.7	-88.4	373,207.42	833,214.83	32° 1' 21.109 N	103° 23' 29.564 W
11,100.0	33.21	180.28	11,084.0	-0.5	-88.4	373,194.28	833,214.75	32° 1' 20.979 N	103° 23' 29.567 W
11,125.0		180.19	11,104.5	-14.7	-88.5	373,180.05	833,214.70	32° 1' 20.838 N	103° 23' 29.569 W
11,150.0		180.11	11,124.3	-30.0	-88.5	373,164.76	833,214.66	32° 1' 20.687 N	103° 23' 29.571 W
11,175.0		180.04	11,143.3	-46.3	-88.5	373,148.46	833,214.63	32° 1' 20.526 N	103° 23' 29.573 W
11,200.0		179.98	11,161.3	-63.6	-88.5	373,131.19	833,214.63	32° 1' 20.355 N	103° 23' 29.574 W
11,225.0		179.92 179.87	11,178.5	-81.8	-88.5 -88.5	373,112.99 373,093.93	833,214.65	32° 1' 20.175 N 32° 1' 19.986 N	103° 23' 29.576 W 103° 23' 29.578 W
11,250.0 11,275.0		179.83	11,194.7 11,209.8	-100.8 -120.7	-88.4	373,074.04	833,214.68 833,214.73	32° 1' 19.789 N	103° 23' 29.579 W
11,300.0		179.03	11,209.0	-120.7	-88.4	373,053.39	833,214.80	32° 1' 19.585 N	103° 23' 29.580 W
11,325.0		179.74	11,236.9	-162.7	-88.3	373,032.03	833,214.89	32° 1' 19.374 N	103° 23' 29.581 W
11,350.0		179.71	11,248.7	-184.7	-88.2	373,010.02	833,215.00	32° 1' 19.156 N	103° 23' 29.582 W
11,375.0		179.67	11,259.4	-207.3	-88.1	372,987.42	833,215.12	32° 1' 18.932 N	103° 23' 29.583 W
11,400.0	69.20	179.64	11,268.9	-230.5	-87.9	372,964.30	833,215.26	32° 1' 18.703 N	103° 23' 29.584 W
11,425.0	72.20	179.60	11,277.1	-254.1	-87.8	372,940.70	833,215.42	32° 1' 18.470 N	103° 23' 29.585 W
11,450.0		179.57	11,284.2	-278.0	-87.6	372,916.71	833,215.59	32° 1' 18.233 N	103° 23' 29.585 W
11,475.0		179.54	11,289.9	-302.4	-87.4	372,892.39	833,215.78	32° 1' 17.992 N	103° 23' 29.585 W
11,500.0		179.51	11,294.4	-327.0	-87.2	372,867.79	833,215.98	32° 1' 17.748 N	103° 23' 29.585 W
11,525.0		179.48	11,297.6	-351.8	-87.0	372,843.00	833,216.20	32° 1' 17.503 N	103° 23' 29.585 W
11,527.0		179.48	11,297.8	-353.7	-87.0	372,841.03	833,216.22	32° 1' 17.484 N	103° 23' 29.585 W
11,550.0	125400 Entr 87.20	<b>y at</b> 11 <b>527.</b> 0 179.45	11,299.4	-376.7	-86.7	372,818.07	833,216.43	32° 1' 17.256 N	103° 23' 29.585 W
11,550.0		179.45	11,299.4	-370.7	-86.5	372,794.76	833,216.66	32° 1' 17.026 N	103° 23' 29.585 W
	0042.4 hold			-100.0	-00.0	512,104.10	000,210.00	52 1 11.02011	103 23 23.000 11
11,600.0		179.42	11,300.0	-426.7	-86.3	372,768.08	833,216.93	32° 1' 16.762 N	103° 23' 29.584 W
11,700.0		179.42	11,300.0	-526.7	-85.2	372,668.09	833,217.93	32° 1' 15.772 N	103° 23' 29.583 W
11,800.0		179.42	11,300.0	-626.7	-84.2	372,568.09	833,218.94	32° 1' 14.783 N	103° 23' 29.581 W
11,900.0		179.42	11,300.0	-726.7	-83.2	372,468.10	833,219.94	32° 1' 13.793 N	103° 23' 29.580 W
12,000.0	90.00	179.42	11,300.0	-826.7	-82.2	372,368.10	833,220.94	32° 1' 12.804 N	103° 23' 29.578 W
12,100.0		179.42	11,300.0	-926.6	-81.2	372,268.11	833,221.95	32° 1' 11.814 N	103° 23' 29.577 W
12,200.0		179.42	11,300.0	-1,026.6	-80.2	372,168.11	833,222.95	32° 1' 10.825 N	103° 23' 29.575 W
12,300.0		179.42	11,300.0	-1,126.6	-79.2	372,068.12	833,223.96	32° 1' 9.835 N	103° 23' 29.574 W
12,400.0		179.42	11,300.0	-1,226.6	-78.2	371,968.12	833,224.96	32° 1' 8.845 N	103° 23' 29.572 W
12,500.0		179.42	11,300.0	-1,326.6	-77.2	371,868.13	833,225.97 833,226.97	32° 1' 7.856 N	103° 23' 29.571 W
12,600.0 12,700.0		179.42 179.42	11,300.0 11,300.0	-1,426.6 -1,526.6	-76.2 -75.2	371,768.13 371,668.14	833,227.97	32° 1' 6.866 N 32° 1' 5.877 N	103° 23' 29.569 W 103° 23' 29.567 W
12,700.0		179.42	11,300.0	-1,626.6	-73.2	371,568.15	833,228.98	32° 1' 4.887 N	103° 23' 29.566 W
12,848.0		179.42	11,300.0	-1,674.6	-74.2	371,520.17	833,229.46	32° 1' 4.413 N	103° 23' 29.565 W
	itry at 12848		,500.0	.,		0,020.11	000,220.10		
	,								

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Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Company:	NEW MEXICO	TVD Reference:	KB @ 3205.0usft
Project:	(SP) LEA	MD Reference:	KB @ 3205.0usft
Site:	EL CAMPEON FED COM PROJECT	North Reference:	Grid
Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

#### Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
12,900.0		179.42	11,300.0	-1,726.6	-73.2	371,468.15	833,229.98	32° 1' 3.898 N	103° 23' 29.564 W
13,000.0		179.42	11,300.0	-1,826.6	-73.2	371,368.16	833,230.99	32° 1' 2.908 N	103° 23' 29.563 W
13,100.0		179.42	11,300.0	-1,926.6	-71.2	371,268.16	833,231.99	32° 1' 1.919 N	103° 23' 29.561 W
13,200.0		179.42	11,300.0	-2,026.6	-70.2	371,168.17	833,233.00	32° 1' 0.929 N	103° 23' 29.560 W
13,300.0		179.42	11,300.0	-2,020.0	-69.2	371,068.17	833,234.00	32° 0' 59.940 N	103° 23' 29.558 W
13,400.0		179.42	11,300.0	-2,120.0	-68.2	370,968.18	833,235.00	32° 0' 58.950 N	103° 23' 29.557 W
13,500.0		179.42	11,300.0	-2,326.6	-67.2	370,868,18	833,236.01	32° 0' 57.960 N	103° 23' 29.555 W
13,600.0		179.42	11,300.0	-2,426.6	-66.2	370,768.19	833,237.01	32° 0' 56.971 N	103° 23' 29.554 W
13,700.0		179.42	11,300.0	-2,526.6	-65.2	370.668.19	833,238.02	32° 0' 55.981 N	103° 23' 29.552 W
13,800.0		179.42	11,300.0	-2,626.6	-64.2	370,568.20	833,239.02	32° 0' 54.992 N	103° 23' 29.550 W
13,900.0		179.42	11,300.0	-2,726.6	-63.2	370,468,20	833,240.03	32° 0' 54.002 N	103° 23' 29.549 W
14,000.0		179.42	11,300.0	-2,826.6	-62.1	370,368.21	833,241.03	32° 0' 53.013 N	103° 23' 29.547 W
14,100.0		179.42	11,300.0	-2,926.5	-61.1	370,268.21	833,242.04	32° 0' 52.023 N	103° 23' 29.546 W
14,170.0		179.42	11,300.0	-2,996.5	-60.4	370,198.24	833,242.74	32° 0' 51.331 N	103° 23' 29.545 W
	cit at 14170.0		,				,		
14,200.0		179.42	11,300.0	-3,026.5	-60.1	370,168.22	833,243.04	32° 0' 51.034 N	103° 23' 29.544 W
14,300.0		179.42	11,300.0	-3,126.5	-59.1	370,068.22	833,244.04	32° 0' 50.044 N	103° 23' 29.543 W
14,400.0		179.42	11,300.0	-3,226.5	-58.1	369,968.23	833,245.05	32° 0' 49.055 N	103° 23' 29.541 W
14,500.0		179.42	11,300.0	-3,326.5	-57.1	369,868.23	833,246.05	32° 0' 48.065 N	103° 23' 29.540 W
14,600.0		179.42	11,300.0	-3,426.5	-56.1	369,768.24	833,247.06	32° 0' 47.076 N	103° 23' 29.538 W
14,700.0	90.00	179.42	11,300.0	-3,526.5	-55.1	369,668.24	833,248.06	32° 0' 46.086 N	103° 23' 29.537 W
14,800.0	90.00	179.42	11,300.0	-3,626.5	-54.1	369,568.25	833,249.07	32° 0' 45.096 N	103° 23' 29.535 W
14,900.0	90.00	179.42	11,300.0	-3,726.5	-53.1	369,468.25	833,250.07	32° 0' 44.107 N	103° 23' 29.534 W
15,000.0	90.00	179.42	11,300.0	-3,826.5	-52.1	369,368.26	833,251.07	32° 0' 43.117 N	103° 23' 29.532 W
15,100.0	90.00	179.42	11,300.0	-3,926.5	-51.1	369,268.26	833,252.08	32° 0' 42.128 N	103° 23' 29.530 W
15,200.0		179.42	11,300.0	-4,026.5	-50.1	369,168.27	833,253.08	32° 0' 41.138 N	103° 23' 29.529 W
15,300.0		179.42	11,300.0	-4,126.5	-49.1	369,068.27	833,254.09	32° 0' 40.149 N	103° 23' 29.527 W
15,400.0		179.42	11,300.0	-4,226.5	-48.1	368,968.28	833,255.09	32° 0' 39.159 N	103° 23' 29.526 W
15,500.0		179.42	11,300.0	-4,326.5	-47.1	368,868.28	833,256.10	32° 0' 38.170 N	103° 23' 29.524 W
15,600.0		179.42	11,300.0	-4,426.5	-46.1	368,768.29	833,257.10	32° 0' 37.180 N	103° 23' 29.523 W
15,700.0		179.42	11,300.0	-4,526.5	-45.1	368,668.29	833,258.10	32° 0' 36.191 N	103° 23' 29.521 W
15,800.0		179.42	11,300.0	-4,626.5	-44.1	368,568.30	833,259.11	32° 0' 35.201 N	103° 23' 29.520 W
15,900.0		179.42	11,300.0	-4,726.5	-43.1	368,468.30	833,260.11	32° 0' 34.211 N	103° 23' 29.518 W
16,000.0		179.42	11,300.0	-4,826.5	-42.1	368,368.31	833,261.12	32° 0' 33.222 N	103° 23' 29.517 W
16,100.0		179.42	11,300.0	-4,926.4	-41.1	368,268.31	833,262.12	32° 0' 32.232 N	103° 23' 29.515 W
16,200.0		179.42	11,300.0	-5,026.4	-40.1	368,168.32	833,263.13	32° 0' 31.243 N 32° 0' 30.253 N	103° 23' 29.513 W
16,300.0 16,400.0		179.42	11,300.0 11,300.0	-5,126.4	-39.0	368,068.32	833,264.13		103° 23' 29.512 W
16,500.0		179.42 179.42	11,300.0	-5,226.4 -5,326.4	-38.0 -37.0	367,968.33 367,868.33	833,265.14 833,266.14	32° 0' 29.264 N 32° 0' 28.274 N	103° 23' 29.510 W 103° 23' 29.509 W
16,600.0		179.42	11,300.0	-5,426.4	-36.0	367,768.34	833,267.14	32° 0' 27.285 N	103° 23' 29.509 W
16,700.0		179.42	11,300.0	-5,526.4	-35.0	367,668.34	833,268.15	32° 0' 26.295 N	103° 23' 29.506 W
16,800.0		179.42	11,300.0	-5,626.4	-34.0	367,568.35	833,269.15	32° 0' 25.306 N	103° 23' 29.504 W
16,813.0		179.42	11,300.0	-5,639.4	-33.9	367,555.38	833,269.28	32° 0' 25.177 N	103° 23' 29.504 W
	125400 Exit			0,000.1	00.0	001,000.00	000,200.20	02 0 20.1111	100 20 20.001 11
16,900.0		179.42	11,300.0	-5,726.4	-33.0	367,468.35	833,270.16	32° 0' 24.316 N	103° 23' 29.503 W
17,000.0		179.42	11,300.0	-5,826.4	-32.0	367,368.36	833,271.16	32° 0' 23.327 N	103° 23' 29.501 W
17,100.0		179.42	11,300.0	-5,926.4	-31.0	367,268.36	833,272.17	32° 0' 22.337 N	103° 23' 29.500 W
17,200.0		179.42	11,300.0	-6,026.4	-30.0	367,168.37	833,273.17	32° 0' 21.347 N	103° 23' 29.498 W
17,300.0		179.42	11,300.0	-6,126.4	-29.0	367,068.37	833,274.17	32° 0' 20.358 N	103° 23' 29.496 W
17,400.0		179.42	11,300.0	-6,226.4	-28.0	366,968.38	833,275.18	32° 0' 19.368 N	103° 23' 29.495 W
17,500.0		179.42	11,300.0	-6,326.4	-27.0	366,868.38	833,276.18	32° 0' 18.379 N	103° 23' 29.493 W
17,600.0		179.42	11,300.0	-6,426.4	-26.0	366,768.39	833,277.19	32° 0' 17.389 N	103° 23' 29.492 W
17,700.0		179.42	11,300.0	-6,526.4	-25.0	366,668.39	833,278.19	32° 0' 16.400 N	103° 23' 29.490 W
17,800.0	90.00	179.42	11,300.0	-6,626.4	-24.0	366,568.40	833,279.20	32° 0' 15.410 N	103° 23' 29.489 W

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Planning Report - Geographic

Database:	Compass	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Company:	NEW MEXICO	TVD Reference:	KB @ 3205.0usft
Project:	(SP) LEA	MD Reference:	KB @ 3205.0usft
Site:	EL CAMPEON FED COM PROJECT	North Reference:	Grid
Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

#### Planned Survey

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Map Northing	Map Easting		
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude	Longitude
17,900.0		179.42	11,300.0	-6,726.4	-23.0	366,468.40	833,280.20	32° 0' 14.421 N	103° 23' 29.487 W
18,000.0		179.42	11,300.0	-6,826.4	-22.0	366,368.41	833,281.20	32° 0' 13.431 N	103° 23' 29.486 W
18,100.0		179.42	11,300.0	-6,926.3	-21.0	366,268.41	833,282.21	32° 0' 12.442 N	103° 23' 29.484 W
18,200.0		179.42	11,300.0	-7,026.3	-20.0	366,168.42	833,283.21	32° 0' 11.452 N	103° 23' 29.483 W
18,300.0		179.42	11,300.0	-7,126.3	-19.0	366,068.42	833,284.22	32° 0' 10.462 N	103° 23' 29.481 W
18,400.0		179.42	11,300.0	-7,226.3	-18.0	365,968.43	833,285.22	32° 0' 9.473 N	103° 23' 29.479 W
18,500.0		179.42	11,300.0	-7,326.3	-17.0	365,868.43	833,286.23	32° 0' 8.483 N	103° 23' 29.478 W
18,600.0		179.42	11,300.0	-7,426.3	-15.9	365,768.44	833,287.23	32° 0' 7.494 N	103° 23' 29.476 W
18,700.0		179.42	11,300.0	-7,526.3	-14.9	365,668.44	833,288.24	32° 0' 6.504 N	103° 23' 29.475 W
18,800.0		179.42	11,300.0	-7,626.3	-13.9	365,568.45	833,289.24	32° 0' 5.515 N	103° 23' 29.473 W
18,900.0		179.42	11,300.0	-7,726.3	-12.9	365,468.45	833,290.24	32° 0' 4.525 N	103° 23' 29.472 W
19,000.0		179.42	11,300.0	-7,826.3	-11.9	365,368.46	833,291.25	32° 0' 3.536 N	103° 23' 29.470 W
19,100.0		179.42	11,300.0	-7,926.3	-10.9 -9.9	365,268.46	833,292.25 833,293.26	32° 0' 2.546 N	103° 23' 29.469 W
19,200.0		179.42	11,300.0	-8,026.3		365,168.47		32° 0' 1.557 N	103° 23' 29.467 W
19,251.0		179.42	11,300.0	-8,077.2	-9.4	365,117.51	833,293.77	32° 0' 1.052 N	103° 23' 29.466 W
	30003 Exit a			0.400.0	0.0	205 000 47	000.004.00	20% 0LO E67 N	400% 001 00 ACC M
19,300.0		179.42	11,300.0	-8,126.3	-8.9	365,068.47 364,968.48	833,294.26	32° 0' 0.567 N	103° 23' 29.466 W
19,400.0		179.42 179.42	11,300.0	-8,226.3	-7.9 -6.9	364,968.48 364,868.48	833,295.27	31° 59' 59.577 N 31° 59' 58.588 N	103° 23' 29.464 W 103° 23' 29.462 W
19,500.0			11,300.0	-8,326.3	-0.9 -5.9	,	833,296.27		
19,600.0 19,700.0		179.42 179.42	11,300.0 11,300.0	-8,426.3 -8,526.3	-5.9 -4.9	364,768.49 364,668.49	833,297.27 833,298.28	31° 59' 57.598 N 31° 59' 56.609 N	103° 23' 29.461 W 103° 23' 29.459 W
19,700.0		179.42	11,300.0	-8,626.3	-4.9	364,568.50	833,299.28	31° 59' 55.619 N	103° 23' 29.459 W
19,800.0		179.42	11,300.0	-8,726.3	-3.9	364,468.50	833,300.29	31° 59' 54.630 N	103° 23' 29.456 W
20,000.0		179.42	11,300.0	-8,826.2	-2.9	364,368.51	833,301.29	31° 59' 53.640 N	103° 23' 29.455 W
20,000.0		179.42	11,300.0	-8,926.2	-1.9 -0.9	364,268.51	833,302.30	31° 59' 52.651 N	103° 23' 29.453 W
20,100.0		179.42	11,300.0	-9,026.2	-0.5	364,168.52	833,303.30	31° 59' 51.661 N	103° 23' 29.452 W
20,200.0		179.42	11,300.0	-9,126.2	1.1	364,068.52	833,304.30	31° 59' 50.672 N	103° 23' 29.450 W
20,400.0		179.42	11,300.0	-9,226.2	2.1	363,968.53	833,305.31	31° 59' 49.682 N	103° 23' 29.448 W
20,400.0		179.42	11,300.0	-9,326.2	3.1	363,868.53	833,306.31	31° 59' 48.692 N	103° 23' 29.447 W
20,600.0		179.42	11,300.0	-9,426.2	4.1	363,768.54	833,307.32	31° 59' 47.703 N	103° 23' 29.445 W
20,700.0		179.42	11,300.0	-9,526.2	5.1	363,668.54	833,308.32	31° 59' 46.713 N	103° 23' 29.444 W
20,800.0		179.42	11,300.0	-9,626.2	6.1	363,568.55	833,309.33	31° 59' 45.724 N	103° 23' 29.442 W
20,900.0		179.42	11,300.0	-9,726.2	7.2	363,468.55	833,310.33	31° 59' 44.734 N	103° 23' 29.441 W
21,000.0		179.42	11,300.0	-9,826.2	8.2	363,368.56	833,311.34	31° 59' 43.745 N	103° 23' 29.439 W
21,100.0		179.42	11,300.0	-9,926.2	9.2	363,268.56	833,312.34	31° 59' 42.755 N	103° 23' 29.438 W
21,200.0		179.42	11,300.0	-10,026.2	10.2	363,168.57	833,313.34	31° 59' 41.766 N	103° 23' 29.436 W
21,300.0		179.42	11,300.0	-10,126.2	11.2	363,068.57	833,314.35	31° 59' 40.776 N	103° 23' 29.435 W
21,400.0		179.42	11,300.0	-10,226.2	12.2	362,968.58	833,315.35	31° 59' 39.787 N	103° 23' 29.433 W
21,500.0		179.42	11,300.0	-10,326.2	13.2	362,868.58	833,316.36	31° 59' 38.797 N	103° 23' 29.431 W
21,600.0		179.42	11,300.0	-10,426.2	14.2	362,768.59	833,317.36	31° 59' 37.807 N	103° 23' 29.430 W
21,615.7		179.42	11,300.0	-10,441.9	14.3	362,752.87	833,317.52	31° 59' 37.652 N	103° 23' 29.430 W
TD at 2	1615.7		•	•		•	•		

Planning Report - Geographic

Database: Company: Project: Site: Well: Wellbore: Design:	Compass NEW MEXIC (SP) LEA EL CAMPEC OWB PWP0	ON FED CO		Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:			Well EL CAMPEON FED STATE COM 122H KB @ 3205.0usft KB @ 3205.0usft Grid Minimum Curvature			
Design Targets Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Eastii (usf		Latitude	Longitude
BHL-EL CAMP 122H - plan misses tar - Point			11,300.0 1615.7usft		13.8 ) TVD, -1044	362,752.87 1.9 N, 14.3 E)	833,3	316.99	31° 59' 37.652 N	103° 23' 29.436 W
FTP-EL CAMP 122H - plan misses tary - Point			11,300.0 1626.2usft	-452.8 MD (11300.0	-86.5 ) TVD, -452.8	372,741.93 3 N, -86.0 E)	833,2	216.66	32° 1' 16.503 N	103° 23' 29.590 W

Plan Annotations					
Measu Dept (usfi	h De	tical L pth +N/ sft) (us		E/-W	Comment
		,000.0	0.0		Start Build 2.00
2,0	37.8 2	,037.8	0.2	-0.2	Start 8781.2 hold at 2037.8 MD
10,8	19.1 10	,818.3	77.5	-86.6	Start DLS 12.00 TFO -132.38
11,5	27.0 11	,297.8	-353.7	-87.0	NMNM 125400 Entry at 11527.0 MD
11,5	73.3 11	,300.0	-400.0	-86.5	Start 10042.4 hold at 11573.3 MD
12,8	48.0 11	,300.0 -1	,674.6	-73.7	FEE Entry at 12848.0 MD
14,1	70.0 11	,300.0 -2	,996.5	-60.4	FEE Exit at 14170.0 MD
16,8	13.0 11	,300.0 -5	,639.4	-33.9	NMNM 125400 Exit at 16813.0 MD
19,2	51.0 11	,300.0 -8	,077.2	-9.4	VB 25630003 Exit at 19251.0 MD
21,6	15.7 11	,300.0 -10	,441.9	14.3	TD at 21615.7

# **NEW MEXICO**

(SP) LEA EL CAMPEON FED COM PROJECT EL CAMPEON FED STATE COM 122H

OWB PWP0

# **Anticollision Report**

05 August, 2024

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Project:	(SP) LEA	TVD Reference:	KB @ 3205.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3205.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED STATE COM 122H	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 Evaluation	ated at: 2.00 Sigma	Casing Method:	Not applied							

Survey Tool Prog	ram	Date 8/5/2024			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	21,615.	7 PWP0 (OWB)	MWD	OWSG_Rev2_ MWD - Standard	

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Dista Between Centres (usft)	nce Between Ellipses (usft)	Separation Factor	Warning
EL CAMPEON FED COM PROJECT						
EL CAMPEON FED STATE COM 112H - OWB - PWP0 EL CAMPEON FED STATE COM 112H - OWB - PWP0 EL CAMPEON FED STATE COM 112H - OWB - PWP0 EL CAMPEON FED STATE COM 113H - OWB - PWP0 EL CAMPEON FED STATE COM 123H - OWB - PWP0 EL CAMPEON FED STATE COM 123H - OWB - PWP0 EL CAMPEON FED STATE COM 124H - OWB - PWP0	2,405.2 2,900.0 3,300.0	2,405.6 2,900.3 3,300.2	32.1 33.8 37.4	15.1 13.4 14.3		ES SF Out of range Out of range Out of range Out of range
EL CAMPEON FED STATE COM 152H - OWB - PWP0 EL CAMPEON FED STATE COM 152H - OWB - PWP0 EL CAMPEON FED STATE COM 153H - OWB - PWP0 EL CAMPEON FED STATE COM 154H - OWB - PWP0	2,000.0 21,500.0	2,000.0 21,047.9	33.0 518.2	18.9 260.9	2.014	CC, ES SF Out of range Out of range

Irvey Prog		MWD								Rule Assig	jned:		Offset Well Error:	0.0 usf
Refer leasured Depth (usft)	ence Vertical Depth (usft)	Offs Measured Depth (usft)	set Vertical Depth (usft)	Semi M Reference (usft)	lajor Axis Offset (usft)	Highside Toolface (°)	Offset Wellb +N/-S (usft)	ore Centre +E/-W (usft)	Dist Between Centres (usft)	tance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	88.61	0.8	33.0	33.0					
100.0	100.0	100.0	100.0	0.3	0.3	88.61	0.8	33.0	33.0	32.5	0.50	65.755		
200.0	200.0	200.0	200.0	0.6	0.6	88.61	0.8	33.0	33.0	31.8	1.22	27.075		
300.0	300.0	300.0	300.0	1.0	1.0	88.61	0.8	33.0	33.0	31.1	1.94	17.048		
400.0	400.0	400.0	400.0	1.3	1.3	88.61	0.8	33.0	33.0	30.3	2.65	12.440		
500.0	500.0	500.0	500.0	1.7	1.7	88.61	0.8	33.0	33.0	29.6	3.37	9.793		
600.0	600.0	600.0	600.0	2.0	2.0	88.61	0.8	33.0	33.0	28.9	4.09	8.075		
700.0	700.0	700.0	700.0	2.4	2.4	88.61	0.8	33.0	33.0	28.2	4.80	6.870		
800.0	800.0	800.0	800.0	2.8	2.8	88.61	0.8	33.0	33.0	27.5	5.52	5.978		
900.0	900.0	900.0	900.0	3.1	3.1	88.61	0.8	33.0	33.0	26.8	6.24	5.291		
1,000.0	1,000.0	1,000.0	1,000.0	3.5	3.5	88.61	0.8	33.0	33.0	26.0	6.95	4.745		
1,100.0	1,100.0	1,100.0	1,100.0	3.8	3.8	88.61	0.8	33.0	33.0	25.3	7.67	4.302		
1,200.0	1,200.0	1,200.0	1,200.0	4.2	4.2	88.61	0.8	33.0	33.0	24.6	8.39	3.934		
1,300.0	1,300.0	1,300.0	1,300.0	4.6	4.6	88.61	0.8	33.0	33.0	23.9	9.11	3.624		
1,400.0	1,400.0	1,400.0	1,400.0	4.9	4.9	88.61	0.8	33.0	33.0	23.2	9.82	3.360		
1,500.0	1,500.0	1,500.0	1,500.0	5.3	5.3	88.61	0.8	33.0	33.0	22.5	10.54	3.131		

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

8/5/2024 7:05:08AM

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Project:	(SP) LEA	TVD Reference:	KB @ 3205.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3205.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED STATE COM 112H - OWB - PWPO

rvey Pro		MWD								Rule Assig	jned:		Offset Well Error:	0.0 us
Refe	rence Vertical	Off	set Vertical	Semi N Reference	lajor Axis Offset	Highside	Offset Wellb	ore Centre	Dis Between	tance Between	•	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)			
1,600.0	1,600.0	1,600.0	1,600.0	5.6	5.6	88.61	0.8	33.0	33.0	21.7	11.26	2.932		
1,700.0	1,700.0	1,700.0	1,700.0	6.0	6.0	88.61	0.8	33.0	33.0	21.0	11.97	2.756		
1,800.0	1,800.0	1,800.0	1,800.0	6.3	6.3	88.61	0.8	33.0	33.0	20.3	12.69	2.600		
1,900.0	1,900.0	1,900.0	1,900.0	6.7	6.7	88.61	0.8	33.0	33.0	19.6	13.41	2.461		
2,000.0	2,000.0	2,000.0	2,000.0	7.1	7.1	88.61	0.8	33.0	33.0	18.9	14.12	2.336		
2,037.8	2,037.8	2,038.2	2,038.2	7.2	7.2	137.38	0.6	32.8	33.0	18.6	14.39	2.292		
2,100.0	2,100.0	2,100.5	2,100.5	7.4	7.4	139.61	-0.1	31.9	32.7	17.9	14.81	2.209		
2,200.0	2,200.0	2,200.5	2,200.4	7.8	7.7	143.35	-1.3	30.4	32.4	16.9	15.50	2.088		
2,300.0	2,300.0	2,300.4	2,300.4	8.1	8.1	147.17	-2.5	29.0	32.1	16.0	16.19	1.986		
2,400.0	2,400.0	2,400.4	2,400.3	8.5	8.4	151.02	-3.8	27.5	32.1	15.2	16.88	1.900		
2,405.2	2,405.1	2,405.6	2,405.5	8.5	8.4	151.22	-3.8	27.4	32.1	15.1	16.91	1.896 CC		
2,500.0	2,500.0	2,500.4	2,500.3	8.8	8.7	154.87	-5.0	26.0	32.1	14.6	17.57	1.829		
2,600.0	2,599.9	2,600.4	2,600.3	9.2	9.1	158.69	-6.2	24.6	32.3	14.1	18.26	1.770		
2,700.0	2,699.9	2,700.3	2,700.2	9.5	9.4	162.44	-7.4	23.1	32.7	13.7	18.96	1.724		
2,800.0	2,799.9	2,800.3	2,800.2	9.9	9.8	166.10	-8.6	21.6	33.2	13.5	19.66	1.688		
2,900.0	2,899.9	2,900.3	2,900.1	10.3	10.1	169.64	-9.9	20.2	33.8	13.4	20.36	1.660 ES		
3,000.0	2,999.9	3,000.3	3,000.1	10.6	10.5	173.04	-11.1	18.7	34.5	13.5	21.06	1.640		
3,100.0	3,099.9	3,100.2	3,100.0	11.0	10.8	176.28	-12.3	17.2	35.4	13.6	21.76	1.627		
3,200.0	3,199.9	3,200.2	3,200.0	11.3	11.1	179.36	-13.5	15.7	36.4	13.9	22.46	1.619		
3,300.0	3,299.9	3,300.2	3,300.0	11.7	11.5	-177.72	-14.8	14.3	37.4	14.3	23.17	1.616 SF		
3,400.0	3,399.9	3,400.2	3,399.9	12.0	11.8	-174.98	-16.0	12.8	38.6	14.7	23.87	1.616		
3,500.0	3,499.9	3,500.2	3,499.9	12.4	12.2	-172.40	-17.2	11.3	39.8	15.2	24.58	1.620		
3,600.0	3,599.9	3,600.1	3,599.8	12.7	12.5	-169.98	-18.4	9.9	41.1	15.9	25.28	1.627		
3,700.0	3,699.9	3,700.1	3,699.8	13.1	12.9	-167.71	-19.6	8.4	42.5	16.5	25.99	1.636		
3,800.0	3,799.8	3,800.1	3,799.8	13.5	13.2	-165.59	-20.9	6.9	44.0	17.3	26.70	1.647		
3,900.0	3,899.8	3,900.1	3,899.7	13.8	13.6	-163.61	-22.1	5.5	45.5	18.1	27.41	1.659		
4,000.0	3,999.8	4,000.0	3,999.7	14.2	13.9	-161.75	-23.3	4.0	47.0	18.9	28.12	1.673		
4,100.0	4,099.8	4,100.0	4,099.6	14.5	14.3	-160.02	-24.5	2.5	48.6	19.8	28.82	1.687		
4,200.0	4,199.8	4,200.0	4,199.6	14.9	14.6	-158.40	-25.8	1.0	50.3	20.7	29.53	1.702		
4,300.0	4,299.8	4,300.0	4,299.6	15.2	15.0	-156.88	-27.0	-0.4	52.0	21.7	30.24	1.718		
4,400.0	4,399.8	4,399.9	4,399.5	15.6	15.4	-155.46	-28.2	-1.9	53.7	22.7	30.95	1.734		
4,500.0	4,499.8	4,499.9	4,499.5	16.0	15.7	-154.13	-29.4	-3.4	55.4	23.8	31.67	1.750		
4,600.0	4,599.8	4,599.9	4,599.4	16.3	16.1	-152.88	-30.6	-4.8	57.2	24.8	32.38	1.767		
4,700.0	4,699.8	4,699.9	4,699.4	16.7	16.4	-151.70	-31.9	-6.3	59.0	25.9	33.09	1.783		
4,800.0	4,799.8	4,799.8	4,799.3	17.0	16.8	-150.60	-33.1	-7.8	60.8	27.0	33.80	1.799		
4,900.0	4,899.7	4,899.8	4,899.3	17.4	17.1	-149.56	-34.3	-9.3	62.7	28.2	34.51	1.816		
5,000.0	4,999.7	4,999.8	4,999.3	17.8	17.5	-148.58	-35.5	-10.7	64.5	29.3	35.22	1.832		
5,100.0	5,099.7	5,099.8	5,099.2	18.1	17.8	-147.65	-36.8	-12.2	66.4	30.5	35.94	1.848		
5,200.0	5,199.7	5,199.8	5,199.2	18.5	18.2	-146.78	-38.0	-13.7	68.3	31.7	36.65	1.864		
5,300.0	5,299.7	5,299.7	5,299.1	18.8	18.5	-145.95	-39.2	-15.1	70.2	32.9	37.36	1.880		
5,400.0	5,399.7	5,399.7		19.2	18.9	-145.17	-40.4	-16.6	72.1	34.1	38.07	1.895		
5,500.0	5,499.7	5,499.7	5,499.1	19.5	19.3	-144.43	-41.6	-18.1	74.1	35.3	38.79	1.910		
5,600.0	5,599.7	5,599.7	5,599.0	19.9	19.6	-143.72	-42.9	-19.5	76.0	36.5	39.50	1.925		
5,700.0 5,800.0	5,699.7 5,799.7	5,699.6 5,799.6	5,699.0 5,798.9	20.3 20.6	20.0 20.3	-143.05 -142.42	-44.1 -45.3	-21.0 -22.5	78.0 80.0	37.8 39.0	40.21 40.93	1.940 1.954		
5,900.0	5,899.7	5,899.6	5,898.9	21.0	20.7	-141.81	-46.5	-24.0	82.0	40.3	41.64	1.968		
6,000.0	5,999.7	5,999.6	5,998.8	21.3	21.0	-141.24	-47.8	-25.4	83.9	41.6	42.35	1.982		
6,100.0	6,099.6	6,099.5	6,098.8	21.7	21.4	-140.69	-49.0	-26.9	85.9	42.9	43.07	1.996		
6,200.0 6,300.0	6,199.6 6,299.6	6,199.5 6,299.5	6,198.8 6,298.7	22.0 22.4	21.8 22.1	-140.16 -139.66	-50.2 -51.4	-28.4 -29.8	88.0 90.0	44.2 45.5	43.78 44.50	2.009 2.022		
6,400.0	6,399.6	6,399.5	6,398.7	22.8	22.5	-139.18	-52.6	-31.3	92.0	46.8	45.21	2.035		
6,500.0	6,499.6	6,499.5	6,498.6	23.1	22.8	-138.73	-53.9	-32.8	94.0	48.1	45.92	2.047		

8/5/2024 7:05:08AM

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Project:	(SP) LEA	TVD Reference:	KB @ 3205.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3205.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED STATE COM 112H - OWB - PWPO Offset Site Error: 0.0 usft Survey Program: Reference Measured Vertical Offset Well Error: 0.0 usft 0-MWD Rule Assigned: Semi Major Axis Reference Offset Distance een Between Offset Offset Wellbore Centre Vertical Highside Minimum Separation Warning Measured Between +N/-S +E/-W Depth Depth Depth Depth Toolface Centres Ellipses Separation Factor (usft) (usft) (usft) (usft) (usft) (usft) (usft) (usft) (°) (usft) (usft) (usft) 6,600.0 6,599.6 6,599.4 6,598.6 23.5 23.2 -138.29 -55.1 -34.2 96.0 49.4 46.64 2.059 6.700.0 6.699.6 6.699.4 6.698.6 23.8 23.5 -137.87 -56.3 -35.7 98.1 50.7 47.35 2.071 6.798.5 -137.46 -57.5 -37.2 100.1 2.083 6.800.0 6.799.6 6.799.4 24.2 23.9 52.1 48.07 6.900.0 6.899.6 6.899.4 6.898.5 24 6 24 2 -13707-58.8 -387 102.2 534 48 78 2 094 104.2 7,000.0 6,999.6 6,999.3 6,998.4 24.9 24.6 -136.70 -60.0 -40.1 54.7 49.50 2.105 7,100.0 7.099.6 7,099.3 7.098.4 25.3 25.0 -136.34 -61.2 -41.6 106.3 56.1 50.21 2.116 7.200.0 7.199.5 7.199.3 7.198.3 25.6 25.3 -136 00 -624 -431 108.3 574 50.93 2 127 7,299.3 7,298.3 -135.67 -44.5 7,300.0 7,299.5 26.0 25.7 -63.6 110.4 58.8 51.64 2.138 7,400.0 7,399.5 7,399.2 7,398.3 26.4 26.0 -135.35 -64.9 -46.0 112.5 60.1 52.36 2.148 7.499.5 7.499.2 7.498.2 26.7 26.4 -135.04 -47.5 114.5 2.158 7.500.0 -66.1 61.5 53.07 7,600.0 7,599.5 7,599.2 7.598.2 27.1 26.8 -134.74 -67.3 -48 9 116.6 62.8 53.79 2.168 7,699.2 27.4 27.1 -68.5 -50.4 118.7 2.178 7.700.0 7.699.5 7.698.1 -134.46 64.2 54.50 7,800.0 7,799.5 7,799.1 7,798.1 27.8 27.5 -134.18 -69.8 -51.9 120.8 65 5 55.22 2.187 7,899.5 7,899.1 7,898.1 -133.91 -71.0 7,900.0 28.1 27.8 -53.4 122.8 66.9 55.94 2.196 8,000.0 7,999.5 7,999.1 7,998.0 28.5 28.2 -133.66 -72.2 -54.8 124.9 68.3 56.65 2.205 8.099.5 8.099.1 8.098.0 28.9 28.5 -133.41 -73.4 -56.3 127.0 69.7 2.214 8,100.0 57.37 -133.16 8,200.0 8.199.5 8,199,1 8,197,9 29.2 28.9 -74.6 -57.8 129.1 71.0 58.08 2.223 -132.93 -59.2 58.80 8,300.0 8,299.5 8,299.0 8,297.9 29.6 29.3 -75.9 131.2 72.4 2.231 8 400 0 8 399 4 8 399 0 8 397 8 29.9 296 -13270-77 1 -60 7 133.3 738 59 51 2 240 8.500.0 8,499.4 8,499.0 8,497.8 30.3 30.0 -132.48 -78.3 -62.2 135.4 75.2 60.23 2.248 8,599.0 -132.27 2.256 8,600.0 8,599.4 8,597.8 30.7 30.3 -79.5 -63.6 137.5 76.5 60.95 8,700.0 8,699.4 8,698.9 8 697 7 31.0 30.7 -132.06-80.8 -65.1 139.6 77.9 61.66 2 2 6 4 8,800.0 8,799.4 8,798.9 8,797.7 31.1 -131.86 -82.0 -66.6 141.7 79.3 62.38 2.271 31.4 8,900.0 8,899.4 8,898.9 8,897.6 31.7 31.4 -131.67 -83.2 -68.1 143.8 80.7 63.09 2.279 9.000.0 8,999.4 8.998.9 8,997.6 32.1 31.8 -131.48-84.4 -69.5145.9 82.1 63.81 2.286 9,100.0 9,099.4 9,098.8 9,097.6 32.4 32.1 -131.30 -85.6 -71.0 148.0 83.5 64.53 2 2 9 4 9,200.0 9,199.4 9,198.8 9,197.5 32.8 32.5 -131.12 -86.9 -72.5 150.1 84.9 65.24 2.301 9.300.0 9 299 4 9 298 8 9 297 5 33.2 32.8 -130.94-88 1 -739 152.2 86.3 65 96 2 308 9,400.0 9.399.4 9,398.8 9.397.4 33.5 33.2 -130.77-89.3 -75.4 154.3 87.7 66.67 2.315 9,500.0 9,499.3 9,498.8 9,497.4 33.9 33.6 -130.61 -90.5 -76.9 156.4 89.0 67.39 2.321 9,600.0 9.599.3 9.598.7 9.597.3 34.2 -130.45 -91.8 -78.3 158.6 68.11 2.328 33.9 90.4 9,700.0 9,699.3 9,698.7 9,697.3 34.6 34.3 -130.30 -93.0 -79.8 160.7 91.8 68.82 2.335 9,800.0 9,799.3 9,798.7 9,797.3 35.0 34.6 -130.14 -94.2 -81.3 162.8 93.2 69.54 2.341 9,900.0 9,899.3 9.898.7 9.897.2 35.3 35.0 -130.00 -95.4 -82.8 164.9 94.6 70.26 2.347 10,000.0 9,999.3 9,998.6 9,997.2 35.7 35.4 -129.85 -96.6 -84.2 167.0 96.0 70.97 2 3 5 3 10.100.0 10.099.3 10,075.0 10.073.2 36.0 35.6 -129.82 -102.7 -85.3 175.9 104.9 71.05 2.476 10.200.0 10.199.3 10,143.4 10.139.8 364 35.9 -129.94-118 4 -86 1 1996 129 6 69 92 2 854 10,300.0 10,299.3 10,207.3 10,199.3 36.7 36.1 -130.13 -141.4 -86.8 236.6 168.5 68.08 3.475 10,400.0 10,399.3 10,264.0 10,249.1 37.1 36.3 -130.32 -168.4 -87.2 285.0 219.1 65.84 4.328 10.313.3 -130.50 10.500.0 10.499.3 10.289.6 37.5 36.5 -196.4-87.6 342.8 279.2 63.50 5.397 10.600.0 10.599.3 10.350.0 10.317.7 37.8 36.6 -130.62-220.0 -87.7 408.2 347.3 60.83 6.710 10,700.0 10,699.2 10,392.0 10,347.7 38.2 36.8 -130.76 -249.5 -87.9 479.5 420.2 59.28 8.089

			- CC -	Min centre	e to center (	distance	e or coverge	nt point, SF	- min sepa	aration fac	tor, ES -	min ellips	e separatio	on
L	11,000.0	10,995.2	10,483.8	10,403.2	39.2	37.1	-0.57	-322.4	-88.0	696.8	642.8	54.06	12.890	
	10,975.0	10,971.7	10,475.0	10,398.5	39.1	37.1	-0.77	-315.0	-88.0	681.4	627.0	54.49	12.505	
	10,950.0	10,947.7	10,475.0	10,398.5	39.0	37.1	-1.07	-315.0	-88.0	665.5	610.1	55.36	12.020	
	10,925.0	10,923.5	10,459.9	10,390.1	39.0	37.0	-1.51	-302.4	-88.0	648.6	593.2	55.44	11.700	
	10,900.0	10,898.9	10,450.0	10,384.4	38.9	37.0	-2.28	-294.3	-88.0	631.2	575.5	55.76	11.321	
	10,875.0	10,874.1	10,450.0	10,384.4	38.8	37.0	-3.89	-294.3	-88.0	613.2	556.6	56.61	10.832	

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10 799 2

10,818.3

10.824.2

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10,800.0 10,819.1

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497.9

513.6

518.4

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10.479

10 425 0

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10 369 2

10,369.2

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10.376.9

38.5

38.6

38.6

38.7

36.9

36.9

36.9

37.0

-130.86

-130.86

-68.72

-8.53

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Project:	(SP) LEA	TVD Reference:	KB @ 3205.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3205.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

ırvey Proş Refer		MWD Off:	set	Semi N	Major Axis		Offset Wellb	ore Centre	Dist	Rule Assig	gned:		Offset Well Error:	0.0 u
easured 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	
11,025.0	11,018.3	10,491.9	10,407.4	39.3	37.2	-0.43	-329.3	-88.0	711.5	657.9	53.59	13.277		
1,050.0	11,040.8	10,500.0	10,411.5	39.3	37.2	-0.33	-336.3	-88.0	725.5	672.4	53.10	13.662		
1,075.0	11,062.7	10,508.6	10,415.7	39.4	37.2	-0.25	-343.8	-88.0	738.7	686.1	52.63	14.036		
1,100.0	11,084.0	10,517.0	10,419.7	39.5	37.3	-0.19	-351.2	-87.9	751.2	699.0	52.15	14.405		
1,125.0	11,104.5	10,525.0	10,423.4	39.5	37.3	-0.14	-358.3	-87.9	762.9	711.3	51.64	14.774		
1,150.0	11,124.3	10,534.2	10,427.5	39.6	37.3	-0.10	-366.5	-87.9	773.9	722.7	51.18	15.120		
1,175.0	11,143.3	10,550.0	10,434.1	39.6	37.4	-0.07	-380.9	-87.9	784.1	733.1	50.99	15.379		
1,200.0	11,161.3	10,550.0	10,434,1	39.7	37.4	-0.04	-380.9	-87.9	793.4	743.3	50.16	15.818		

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Project:	(SP) LEA	TVD Reference:	KB @ 3205.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3205.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

rvey Pro	gram: 0	-MWD	aat	Cami I	laior Axis		Offeet Mall	oro Contro	Dist	Rule Assig	gned:		Offset Well Error:	0.0
Refer easured Depth (usft)		Off Measured Depth (usft)	set Vertical Depth (usft)	Reference (usft)	Offset	Highside Toolface (°)	Offset Wellb +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	tance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0		0.0	0.0	0.0	88.61	0.8	33.0	33.0	lasid	(usity			
100.0	100.0	100.0	100.0	0.3	0.3	88.61	0.8	33.0	33.0	32.5	0.50	65.755		
200.0	200.0	200.0	200.0	0.6	0.6	88.61	0.8	33.0	33.0	31.8	1.22	27.075		
300.0	300.0	300.0	300.0	1.0	1.0	88.61	0.8	33.0	33.0	31.1	1.94	17.048		
400.0	400.0	400.0	400.0	1.3	1.3	88.61	0.8	33.0	33.0	30.3	2.65	12.440		
500.0	500.0	500.0	500.0	1.7	1.7	88.61	0.8	33.0	33.0	29.6	3.37	9.793		
600.0	600.0	600.0	600.0	2.0	2.0	88.61	0.8	33.0	33.0	28.9	4.09	8.075		
700.0	700.0	700.0	700.0	2.4	2.4	88.61	0.8	33.0	33.0	28.2	4.80	6.870		
800.0	800.0	800.0	800.0	2.8	2.8	88.61	0.8	33.0	33.0	27.5	5.52	5.978		
900.0	900.0	900.0	900.0	3.1	3.1	88.61	0.8	33.0	33.0	26.8	6.24	5.291		
1,000.0	1,000.0	1,000.0	1,000.0	3.5	3.5	88.61	0.8	33.0	33.0	26.0	6.95	4.745		
1,100.0	1,100.0	1,100.0	1,100.0	3.8	3.8	88.61	0.8	33.0	33.0	25.3	7.67	4.302		
1,200.0	1,200.0	1,200.0	1,200.0	4.2	4.2	88.61	0.8	33.0	33.0	24.6	8.39	3.934		
1,300.0	1,300.0	1,300.0	1,300.0	4.6	4.6	88.61	0.8	33.0	33.0	23.9	9.11	3.624		
1,400.0	1,400.0	1,400.0	1,400.0	4.9	4.9	88.61	0.8	33.0	33.0	23.2	9.82	3.360		
1,500.0	1,500.0	1,500.0	1,500.0	5.3	5.3	88.61	0.8	33.0	33.0	22.5	10.54	3.131		
1,600.0	1,600.0	1,600.0	1,600.0	5.6	5.6	88.61	0.8	33.0	33.0	21.7	11.26	2.932		
1,700.0	, 1,700.0	1,700.0	1,700.0	6.0	6.0	88.61	0.8	33.0	33.0	21.0	11.97	2.756		
1,800.0	1,800.0	1,800.0	1,800.0	6.3	6.3	88.61	0.8	33.0	33.0	20.3	12.69	2.600		
1,900.0	1,900.0	1,900.0	1,900.0	6.7	6.7	88.61	0.8	33.0	33.0	19.6	13.41	2.461		
2,000.0	2,000.0	2,000.0	2,000.0	7.1	7.1	88.61	0.8	33.0	33.0	18.9	14.12	2.336 CC	, ES	
2,037.8	2,037.8	2,037.4	2,037.4	7.2	7.2	137.04	0.8	33.2	33.4	19.0	14.39	2.323		
2,100.0	2,100.0	2,099.2	2,099.2	7.4	7.4	137.71	1.0	34.5	35.3	20.5	14.82	2.383		
2,200.0	2,200.0	2,199.1	2,199.1	7.8	7.8	138.59	1.3	36.8	38.6	23.1	15.52	2.489		
2,300.0	2,300.0	2,299.1	2,299.0	8.1	8.1	139.34	1.6	39.1	41.9	25.7	16.21	2.586		
2,400.0	2,400.0	2,399.0	2,398.9	8.5	8.4	139.98	1.9	41.5	45.3	28.3	16.91	2.675		
2,500.0	2,500.0	2,499.0	2,498.8	8.8	8.8	140.53	2.2	43.8	48.6	31.0	17.62	2.757		
2,600.0	2,599.9	2,598.9	2,598.8	9.2	9.1	141.01	2.6	46.1	51.9	33.6	18.32	2.833		
2,700.0	2,699.9	2,698.9	2,698.7	9.5	9.5	141.43	2.9	48.4	55.2	36.2	19.02	2.903		
2,800.0	2,799.9	2,798.8	2,798.6	9.9	9.8	141.80	3.2	50.7	58.6	38.8	19.73	2.969		
2,900.0	2,899.9	2,898.7	2,898.5	10.3	10.2	142.13	3.5	53.1	61.9	41.5	20.43	3.029		
3,000.0	2,999.9	2,998.7	2,998.4	10.6	10.5	142.43	3.8	55.4	65.2	44.1	21.14	3.086		
3,100.0	3,099.9	3,098.6	3,098.3	11.0	10.9	142.70	4.1	57.7	68.6	46.7	21.84	3.139		
3,200.0	3,199.9	3,198.6	3,198.3	11.3	11.3	142.95	4.4	60.0	71.9	49.3	22.55	3.188		
3,300.0	3,299.9	3,298.5	3,298.2	11.7	11.6	143.17	4.7	62.3	75.2	52.0	23.26	3.235		
3,400.0	3,399.9	3,398.5	3,398.1	12.0	12.0	143.38	5.0	64.6	78.6	54.6	23.97	3.279		
3,500.0	3,499.9	3,498.4	3,498.0	12.4	12.3	143.57	5.3	67.0	81.9	57.2	24.68	3.320		
3,600.0	3,599.9	3,598.3	3,597.9	12.7	12.7	143.74	5.7	69.3	85.3	59.9	25.39	3.359		
3,700.0	3,699.9	3,698.3	3,697.8	13.1	13.0	143.90	6.0	71.6	88.6	62.5	26.10	3.395		
3,800.0	3,799.8	3,798.2	3,797.8	13.5	13.4	144.05	6.3	73.9	91.9	65.1	26.81	3.430		
3,900.0	3,899.8	3,898.2	3,897.7	13.8	13.7	144.18	6.6	76.2	95.3	67.8	27.52	3.463		
4,000.0	3,999.8	3,998.1	3,997.6	14.2	14.1	144.31	6.9	78.5	98.6	70.4	28.23	3.494		
4,100.0	4,099.8	4,098.1	4,097.5	14.5	14.4	144.43	7.2	80.9	102.0	73.0	28.94	3.524		
4,200.0	4,199.8	4,198.0	4,197.4	14.9	14.8	144.55	7.5	83.2	105.3	75.7	29.65	3.552		
4,300.0	4,299.8	4,298.0	4,297.3	15.2	15.2	144.65	7.8	85.5	108.7	78.3	30.36	3.579		
4,400.0	4,399.8	4,397.9	4,397.3	15.6	15.5	144.75	8.1	87.8	112.0	80.9	31.07	3.605		
4,500.0	4,499.8	4,497.8	4,497.2	16.0	15.9	144.84	8.5	90.1	115.4	83.6	31.79	3.630		
4,600.0	4,599.8	4,597.8	4,597.1	16.3	16.2	144.93	8.8	92.5	118.7	86.2	32.50	3.653		
4,700.0	4,699.8	4,697.7	4,697.0	16.7	16.6	145.02	9.1	94.8	122.1	88.9	33.21	3.675		
4,800.0	4,799.8	4,797.7	4,796.9	17.0	16.9	145.10	9.4	97.1	125.4	91.5	33.92	3.697		
4,900.0	4,899.7	4,897.6	4,896.8	17.4	17.3	145.17	9.7	99.4	128.8	94.1	34.64	3.717		
5,000.0	4,999.7	4,997.6	4,996.8	17.8	17.7	145.24	10.0	101.7	132.1	96.8	35.35	3.737		

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COMPASS 5000.17 Build 03

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Project:	(SP) LEA	TVD Reference:	KB @ 3205.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3205.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED STATE COM 152H - OWB - PWPO Offset Site Error: 0.0 usft Survey Program: Reference Measured Vertical Offset Well Error: 0.0 usft 0-MWD Rule Assigned: Semi Major Axis rence Offset Distance een Between Offset Offset Wellbore Centre Vertical Reference Highside Minimum Separation Warning Measured Between +N/-S +E/-W Depth Depth Depth Depth Toolface Centres Ellipses Separation Factor (usft) (usft) (usft) (usft) (usft) (usft) (usft) (usft) (°) (usft) (usft) (usft) 5,100.0 5,099.7 5,097.5 5,096.7 18.1 18.0 145.31 10.3 104.0 135.5 99.4 36.06 3.756 5.200.0 5,199.7 5.197.4 5,196.6 18.5 18.4 145.37 10.6 106.4 138.8 102.0 36.78 3.774 145.43 108.7 5.300.0 5.299.7 5.297.4 5.296.5 18.8 18.7 10.9 142.1 104.7 37.49 3.792 5 400 0 5 399 7 5 397 3 5.396.4 192 191 145 49 11 2 111 0 145 5 107.3 38 20 3 808 113.3 148.8 5,500.0 5,499.7 5,497.3 5,496.3 19.5 19.4 145.55 11.6 109.9 38.92 3.825 5,600.0 5,599.7 5.597.2 5.596.2 19.9 19.8 145.60 11.9 115.6 152.2 112.6 39.63 3.840 5,700.0 5 699 7 5.697.2 5 696 2 20.3 20.2 145.65 122 118 0 155.5 115.2 40 35 3 855 145.70 5,800.0 5,799.7 5,797.1 5,796.1 20.6 20.5 12.5 120.3 158.9 117.8 41.06 3.870 5,900.0 5,899.7 5,897.1 5,896.0 21.0 20.9 145.75 12.8 122.6 162.2 120.5 41.77 3.884 5.999.7 5.997.0 5.995.9 145.79 165.6 123.1 6.000.0 21.3 21.2 13.1 124.9 42.49 3.897 6,100.0 6.099.6 6,096.9 6.095.8 21.7 21.6 145.84 13.4 127.2 168.9 125 7 43.20 3.910 21.9 13.7 129.5 3.923 6.200.0 6.199.6 6.196.9 6.195.7 22.0 145.88 172.3 128.4 43.92 6,300.0 6,299.6 6,296.8 6,295.7 22.4 22.3 145 92 14.0 131.9 175.6 131.0 44.63 3.935 6,396.8 6,400.0 6,399.6 6,395.6 22.8 22.7 145.96 14.4 134.2 179.0 133.6 45.35 3.947 6,500.0 6,499.6 6,496.7 6.495.5 23.1 23.0 145.99 14.7 136.5 182.3 136.3 46.06 3.959 6.600.0 6.599.6 6.596.7 6.595.4 23.5 146.03 138.8 185.7 138.9 46.78 3.970 23.4 15.0 23.7 6,700.0 6.699.6 6.696.6 6.695.3 23.8 146.06 15.3 141.1 189.0 141.5 47.49 3.981 6,799.6 6,796.5 6,795.2 6,800.0 24.2 24.1 146.10 15.6 143.4 192.4 144.2 48.21 3.991 6 900 0 6 899 6 6 896 5 6 895 2 24 6 24.5 146 13 15.9 145.8 195.7 146.8 48 92 4 001 6,999.6 7,000.0 6.996.4 6.995.1 24.9 24.8 146.16 16.2 148.1 199.1 149.5 49 64 4.011 7,100.0 7,099.6 7,096.4 7,095.0 25.3 25.2 146.19 16.5 150.4 202.4 152.1 50.35 4.021 7,200.0 7,199.5 7,196.3 7,194.9 25.6 25.5 146 22 16.8 152.7 205.8 154.7 51.07 4.030 7,300.0 7,299.5 7,296.3 7,294.8 26.0 25.9 146.25 17.1 155.0 209.1 157.4 51.78 4.039 7,400.0 7,399.5 7,396.2 7,394.7 26.4 26.2 146 27 17.5 157.4 212.5 160.0 52.50 4.048 7.496.2 26.7 7.500.0 7.499.5 7.494.7 26.6 146.30 17.8 159.7 215.8 162.6 53.21 4.056 7,600.0 7,599.5 7,596.1 7,594.6 27.1 27.0 146.33 18.1 162.0 219.2 165.3 53.93 4.065 7,700.0 7,699.5 7,696.0 7,694.5 27.4 27.3 146.35 18.4 222.5 167.9 54.64 4.073 164.3 7.800.0 7 799 5 7.796.0 7 794 4 278 277 146 38 187 166.6 225.9 170 5 55 36 4 081 7.900.0 7.899.5 7,895.9 7.894.3 28.1 28.0 146.40 19.0 168.9 229.2 173.2 56.07 4.088 8,000.0 7,999.5 7,995.9 7,994.2 28.5 28.4 146.42 19.3 171.3 232.6 175.8 56.79 4.096 8,100.0 8.099.5 8.095.8 8.094.2 28.9 28.8 146.44 235.9 178.4 57.50 4,103 19.6 173.6 8,200.0 8,199.5 8,195.8 8,194.1 29.2 29.1 146.46 19.9 175.9 239.3 181.1 58.22 4.110 8.300.0 8,299.5 8.295.7 8.294.0 29.6 29.5 146.49 20.2 178.2 242.6 183.7 58.94 4.117 8.400.0 8.399.4 8.395.6 8.393.9 29.9 29.8 146.51 20.6 180.5 246.0 186.3 59.65 4.124 8,500.0 8,499.4 8,495.6 8,493.8 30.3 30.2 146.53 20.9 182.8 249.3 189.0 60.37 4.130 8.600.0 8,599.4 8.595.5 8.593.7 30.7 30.6 146.54 21.2 185.2 252.7 191.6 61.08 4.137 8,700.0 8.699.4 8.695.5 8,693.7 31.0 30.9 146 56 215 187.5 256.0 194.2 61 80 4 143 8,800.0 8,799.4 8,795.4 8,793.6 31.3 146.58 21.8 189.8 259.4 196.9 62.51 4.149 31.4 8,900.0 8,899.4 8,895.4 8,893.5 31.7 31.6 146.60 22.1 192.1 262.7 199.5 63.23 4.155 9.000.0 8.999.4 8.995.3 8.993.4 32.1 32.0 146.62 22.4 194.4 266.1 202.1 63.95 4.161 9.100.0 9.099.4 9.095.3 9.093.3 32.4 32.4 146.63 22.7 196.8 269.4 204.8 64.66 4,167 9,200.0 9,199.4 9,195.2 9,193.2 32.8 32.7 146.65 23.0 199.1 272.8 207.4 65.38 4.173 9 295 1 33 2 33.1 146.67 23.4 201.4 276.1 66.09 9 300 0 9 299 4 9 293 2 210.1 4.178 4.184 9,400.0 9,399.4 9,395.1 9,393.1 33.5 33.4 146.68 23.7 203.7 279.5 212.7 66.81 9,500.0 9.499.3 9.495.0 9,493.0 33.9 33.8 146.70 24.0 206.0 282.8 215.3 67.52 4.189 9.600.0 9.599.3 9.595.0 9.592.9 34.2 34.1 146.71 24.3 208.3 286.2 218.0 68.24 4,194 9,700.0 9,699.3 9,694.9 34.5 146.73 24.6 210.7 289.5 220.6 68.96 4.199 9,692.8 34.6 9,800.0 9,799.3 9,794.9 9,792.7 35.0 146.74 213.0 292.9 223.2 69.67 4.204 34.9 24.9 9,900.0 9.899.3 9.894.8 9.892.7 35.3 35.2 146.75 25.2 215.3 296.3 225.9 70.39 4.209 10.000.0 9 999 3 9 994 7 9 992 6 357 35.6 146 77 25 5 217.6 299.6 228 5 71.10 4 214 10,099.3 10,094.7 10,092.5 36.0 35.9 146.78 25.8 71.82 4.218 10,100.0 219.9 303.0 231.1

 10,200.0
 10,199.3
 10,194.6
 10,192.4
 36.4
 36.3
 146.79
 26.1
 222.2
 306.3
 233.8
 72.54
 4.223

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

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COMPASS 5000.17 Build 03

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Project:	(SP) LEA	TVD Reference:	KB @ 3205.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3205.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED STATE COM 152H - OWB - PWP0

urvey Pro		MWD		Comi N	laian Avia		Offeret Mallh	ara Cantra	Die	Rule Assi	gned:		Offset Well Error:	0.0 us
Refer Measured	rence Vertical	Off Measured			lajor Axis Offset	Highside	Offset Wellb	ore Centre		tance Between	Minimum	Separation	Warning	
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation	Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
10,300.0	10,299.3	10,294.6	10,292.3	36.7	36.7	146.81	26.5	224.6	309.7	236.4	73.25	4.227		
10,400.0	10,399.3	10,394.5	10,392.2	37.1	37.0	146.82	26.8	226.9	313.0	239.0	73.97	4.232		
10,500.0	10,499.3	10,487.3	10,484.8	37.5	37.3	147.59	22.8	229.1	317.1	242.5	74.61	4.251		
10,600.0	10,599.3	10,572.8	10,568.1	37.8	37.6	150.89	4.2	231.2	325.1	250.0	75.07	4.331		
10,700.0	10,699.2	10,650.0	10,639.4	38.2	37.9	155.82	-25.1	233.1	339.7	264.6	75.11	4.523		
10,800.0	10,799.2	10,715.0	10,695.1	38.5	38.1	161.03	-58.5	234.8	363.9	289.6	74.31	4.898		
10,819.1	10,818.3	10,725.0	10,703.3	38.6	38.1	161.90	-64.3	235.0	369.8	295.8	74.00	4.998		
10,825.0	10,824.2	10,729.7	10,707.1	38.6	38.1	-135.31	-67.1	235.1	371.7	297.8	73.97	5.026		
10,850.0	10,849.2	10,744.2	10,718.6	38.7	38.2	-72.87	-75.9	235.5	379.9	306.3	73.57	5.163		
10,875.0	10,874.1	10,758.6	10,729.7	38.8	38.2	-66.09	-85.0	235.8	388.1	315.0	73.14	5.307		
10,900.0	10,898.9	10,775.0	10,742.1	38.9	38.2	-62.33	-95.7	236.2	396.5	323.7	72.76	5.449		
40.005.0	40.000 5	40 707 0	40.754.0	20.0	20.0	50.70	404.0	222 5	40.4.0	222.0	70.40	5 000		
10,925.0	10,923.5	10,787.2	10,751.0	39.0	38.3	-59.78	-104.0	236.5	404.8	332.6	72.18	5.609		
10,950.0	10,947.7	10,800.0	10,760.2	39.0	38.3	-57.61	-112.9	236.8	413.1	341.5	71.60	5.770		
10,975.0	10,971.7	10,815.5	10,771.0	39.1	38.4	-55.54	-124.1	237.2	421.3	350.2	71.12	5.924		
11,000.0	10,995.2	10,829.6	10,780.5	39.2	38.4	-53.76	-134.5	237.5	429.4	358.8	70.56	6.085		
11,025.0	11,018.3	10,843.6	10,789.6	39.3	38.4	-52.14	-145.1	237.8	437.3	367.3	69.99	6.247		
11 050 0	11.040.8	10,857.6	10,798,4	39.3	38.5	-50.65	-156.0	238.2	444.9	375.5	69.42	6.409		
11,050.0	11,040.8	10,857.0	10,798.4	39.3	38.5			238.2		383.4	68.99			
11,075.0			-			-49.16	-169.9		452.4			6.557		
11,100.0	11,084.0	10,885.5	10,814.9 10,823.0	39.5	38.6	-48.04	-178.5	238.8	459.5	391.2	68.26	6.732		
11,125.0	11,104.5	10,900.0		39.5	38.6	-46.88	-190.5	239.1	466.3	398.6	67.71	6.887		
11,150.0	11,124.3	10,913.2	10,830.1	39.6	38.6	-45.85	-201.7	239.3	472.8	405.7	67.11	7.046		
11,175.0	11,143.3	10,925.0	10,836.1	39.6	38.7	-44.95	-211.8	239.6	479.0	412.5	66.46	7.207		
11,200.0	11,161.3	10,940.9	10,843.8	39.7	38.7	-44.03	-225.7	239.9	484.8	418.8	66.01	7.345		
11,225.0	11,178.5	10,950.0	10,848.0	39.8	38.7	-43.34	-233.8	240.1	490.2	424.9	65.29	7.508		
11,250.0	11,194.7	10,950.0	10,856.0	39.8	38.8	-43.54	-250.3	240.1	495.2	430.2	64.97	7.621		
11,275.0	11,209.8	10,982.2	10,861.6	39.9	38.8	-41.92	-262.9	240.4	499.8	435.3	64.49	7.749		
11,275.0	11,209.0	10,502.2	10,001.0	35.5	30.0	-41.52	-202.5	240.7	455.0	433.3	04.45	1.145		
11,300.0	11,223.9	11,000.0	10,868.3	40.0	38.9	-41.30	-279.4	241.0	504.0	439.8	64.19	7.852		
11,325.0	11,236.9	11,009.6	10,871.7	40.0	38.9	-40.87	-288.4	241.2	507.7	444.0	63.62	7.979		
11,350.0	11,248.7	11,025.0	10,876.7	40.1	39.0	-40.43	-303.0	241.4	511.0	447.7	63.29	8.073		
11,375.0	11,259.4	11,037.0	10,880.2	40.1	39.0	-40.09	-314.4	241.6	513.8	450.9	62.89	8.169		
11,400.0	11,268.9	11,050.0	10,883.7	40.2	39.1	-39.80	-326.9	241.9	516.1	453.6	62.57	8.249		
11,400.0	11,200.0	11,000.0	10,000.1	40.2	00.1	00.00	020.0	241.0	010.1	400.0	02.01	0.240		
11,425.0	11,277.1	11,064.4	10,887.3	40.3	39.1	-39.56	-340.9	242.1	518.0	455.7	62.33	8.311		
11,450.0	11,284.2	11,075.0	10,889.6	40.3	39.1	-39.40	-351.2	242.2	519.5	457.4	62.05	8.371		
11,475.0	11,289.9	11,091.7	10,892.8	40.4	39.2	-39.28	-367.7	242.5	520.4	458.4	61.95	8.400		
11,500.0	11,294.4	11,100.0	10,894.1	40.5	39.2	-39.23	-375.8	242.6	520.9	459.2	61.75	8.435		
11,525.0	11,297.6	11,119.0	10,896.7	40.5	39.3	-39.23	-394.7	242.8	520.8	459.1	61.78	8.431		
11,550.0	11,299.4	11,132.7	10,898.1	40.6	39.3	-39.30	-408.3	243.0	520.4	458.6	61.77	8.424		
11,573.3	11,300.0	11,150.0	10,899.3	40.7	39.4	-39.43	-425.5	243.2	519.5	457.7	61.85	8.399		
11,600.0	11,300.0	11,160.1	10,899.8	40.7	39.4	-39.46	-435.6	243.3	518.5	456.6	61.90	8.377		
11,627.4	11,300.0	11,175.3	10,900.0	40.8	39.5	-39.48	-450.8	243.5	518.2	456.2	61.99	8.359		
	11,300.0	11,247.9	10,900.0	41.0	39.7	-39.48	-523.4	244.2	518.2	455.9	62.33	8.314		
11,800.0	11,300.0	11,347.9	10,900.0	41.4	40.1	-39.48	-623.4	245.2	518.2	455.4	62.87	8.243		
11,900.0	11,300.0	11,447.9	10,900.0	41.9	40.6	-39.48	-723.3	246.2	518.2	454.7	63.49	8.162		
12,000.0	11,300.0	11,547.9	10,900.0	42.4	41.1	-39.48	-823.3	247.2	518.2	454.0	64.20	8.072		
12,100.0	11,300.0	11,647.9	10,900.0	42.9	41.7	-39.48	-923.3	248.2	518.2	453.2	64.99	7.974		
12,200.0	11,300.0	11,747.9	10,900.0	43.5	42.3	-39.48	-1,023.3	249.2	518.2	452.4	65.86	7.868		
12,300.0	11,300.0	11,847.9	10,900.0	44.2	43.0	-39.48	-1,123.3	250.2	518.2	451.4	66.81	7.756		
12,400.0	11,300.0	11,947.9	10,900.0	44.9	43.7	-39.48	-1,223.3	251.2	518.2	450.4	67.83	7.639		
12,500.0	11,300.0	12,047.9	10,900.0	45.7	44.5	-39.48	-1,323.3	252.2	518.2	449.3	68.93	7.519		
12,600.0	11,300.0	12,147.9	10,900.0	46.5	45.3	-39.48	-1,423.3	253.2	518.2	448.1	70.08	7.394		
12,700.0	11,300.0	12,247.9	10,900.0	47.3	46.2	-39.48	-1,523.3	254.2	518.2	446.9	71.31	7.268		
	11,300.0	12,347.9		48.2	47.1	-39.48	-1,623.3	255.3	518.2	445.6	72.59	7.139		

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0.0 usft

Offset Site Error:

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Project:	(SP) LEA	TVD Reference:	KB @ 3205.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3205.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED STATE COM 152H - OWB - PWP0

													Onset site Liton.	0.0 03
urvey Pro		MWD		Comi N	laior Avia		Offeret Mallh	ara Cantra	Die	Rule Assi	gned:		Offset Well Error:	0.0 us
Refe Measured	rence Vertical	Off Measured			lajor Axis Offset	Highside	Offset Wellb	ore Centre		tance Between	Minimum	Separation	Warning	
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation	Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
12,900.0	11,300.0	12,447.9	10,900.0	49.1	48.1	-39.48	-1,723.3	256.3	518.2	444.3	73.93	7.010		
13,000.0	11,300.0	12,547.9	10,900.0	50.1	49.1	-39.48	-1,823.3	257.3	518.2	442.9	75.32	6.880		
13,100.0	11,300.0	12,647.9	10,900.0	51.1	50.1	-39.48	-1,923.3	258.3	518.2	441.5	76.76	6.751		
13,200.0	11,300.0	12,747.9	10,900.0	52.1	51.2	-39.48	-2,023.3	259.3	518.2	440.0	78.26	6.622		
13,300.0	11,300.0	12,847.9	10,900.0	53.2	52.2	-39.48	-2,123.3	260.3	518.2	438.4	79.79	6.494		
13,400.0	11,300.0	12,947.9	10,900.0	54.3	53.4	-39.48	-2,223.3	261.3	518.2	436.8	81.38	6.368		
13,500.0	11,300.0	13,047.9	10,900.0	55.4	54.5	-39.48	-2,323.3	262.3	518.2	435.2	83.00	6.244		
13,600.0	11,300.0	13,147.9	10,900.0	56.6	55.7	-39.48	-2,423.3	263.3	518.2	433.6	84.66	6.121		
13,700.0	11,300.0	13,247.9	10,900.0	57.7	56.9	-39.48	-2,523.3	264.3	518.2	431.9	86.35	6.001		
13,800.0	11,300.0	13,347.9	10,900.0	58.9	58.1	-39.48	-2,623.3	265.3	518.2	430.1	88.08	5.883		
13,900.0	11,300.0	13,447.9	10,900.0	60.2	59.3	-39.48	-2,723.2	266.3	518.2	428.4	89.84	5.768		
14,000.0	11,300.0	13,547.9	10,900.0	61.4	60.6	-39.48	-2,823.2	267.3	518.2	426.6	91.64	5.655		
14,100.0	11,300.0	13,647.9	10,900.0	62.6	61.9	-39.48	-2,923.2	268.3	518.2	424.8	93.46	5.545		
14,200.0	11,300.0	13,747.9	10,900.0	63.9	63.2	-39.48	-3,023.2	269.3	518.2	422.9	95.30	5.438		
14,300.0	11,300.0	13,847.9	10,900.0	65.2	64.5	-39.48	-3,123.2	270.3	518.2	421.0	97.18	5.333		
14,400.0	11,300.0	13,947.9	10,900.0	66.5	65.8	-39.48	-3,223.2	271.3	518.2	419.1	99.07	5.231		
44 500 0	44 200 0	440470	40.000.0	07.0	67.4	20.40	2 222 2	070.0	F40.0	117.0	400.00	E 404		
14,500.0	11,300.0	14,047.9	10,900.0	67.8	67.1	-39.48	-3,323.2	272.3	518.2	417.2	100.99	5.131		
14,600.0	11,300.0	14,147.9	10,900.0	69.2	68.5	-39.48	-3,423.2	273.3	518.2	415.3	102.93	5.035		
14,700.0	11,300.0	14,247.9	10,900.0	70.5	69.8	-39.48	-3,523.2	274.3	518.2	413.3	104.89	4.941		
14,800.0	11,300.0	14,347.9	10,900.0	71.9	71.2	-39.48	-3,623.2	275.3	518.2	411.3	106.87	4.849		
14,900.0	11,300.0	14,447.9	10,900.0	73.3	72.6	-39.48	-3,723.2	276.3	518.2	409.4	108.87	4.760		
15 000 0	44 200 0	14 547 0	10.000.0	74.6	74.0	20.40	2 022 2	277.2	540.0	407.2	110.00	4 674		
15,000.0	11,300.0	14,547.9	10,900.0	74.6	74.0	-39.48	-3,823.2	277.3	518.2	407.3	110.88	4.674		
15,100.0	11,300.0	14,647.9	10,900.0	76.0	75.4	-39.48	-3,923.2	278.4	518.2	405.3	112.91	4.590		
15,200.0	11,300.0	14,747.9	10,900.0	77.4	76.8	-39.48	-4,023.2	279.4	518.2	403.3	114.96	4.508		
15,300.0	11,300.0	14,847.9	10,900.0	78.9	78.3	-39.48	-4,123.2	280.4	518.2	401.2	117.01	4.429		
15,400.0	11,300.0	14,947.9	10,900.0	80.3	79.7	-39.48	-4,223.2	281.4	518.2	399.1	119.09	4.352		
15,500.0	11,300.0	15,047.9	10,900.0	81.7	81.1	-39.48	-4,323.2	282.4	518.2	397.0	121.17	4.277		
-	11,300.0	15,147.9	10,900.0	83.1	82.6	-39.48	-4,423.2	283.4	518.2	394.9	123.27	4.204		
15,600.0														
15,700.0	11,300.0	15,247.9	10,900.0	84.6	84.1	-39.48	-4,523.2	284.4	518.2	392.8	125.38	4.133		
15,800.0	11,300.0	15,347.9	10,900.0	86.0	85.5	-39.48	-4,623.2	285.4	518.2	390.7	127.50	4.064		
15,900.0	11,300.0	15,447.9	10,900.0	87.5	87.0	-39.48	-4,723.1	286.4	518.2	388.6	129.63	3.998		
16,000.0	11,300.0	15,547.9	10,900.0	89.0	88.5	-39.48	-4,823.1	287.4	518.2	386.4	131.78	3.933		
16,100.0	11,300.0	15,647.9	10,900.0	90.5	90.0	-39.48	-4,923.1	288.4	518.2	384.3	133.93	3.869		
16,200.0	11,300.0	15,747.9	10,900.0	90.5	90.0 91.4	-39.48	-5,023.1	289.4	518.2	382.1	135.95	3.808		
16,300.0	11,300.0	15,847.9	10,900.0	93.4	92.9	-39.48	-5,123.1	290.4	518.2	380.0	138.26	3.748		
16,400.0	11,300.0	15,947.9	10,900.0	94.9	94.4	-39.48	-5,223.1	291.4	518.2	377.8	140.43	3.690		
16,500.0	11,300.0	16,047.9	10,900.0	96.4	95.9	-39.48	-5,323.1	292.4	518.2	375.6	142.62	3.634		
16,600.0	11,300.0	16,147.9	10,900.0	97.9	97.5	-39.48	-5,423.1	293.4	518.2	373.4	144.81	3.579		
16,700.0	11,300.0	16,247.9	10,900.0	99.4	99.0	-39.48	-5,523.1	293.4	518.2	373.4	144.01	3.525		
16,800.0	11,300.0	16,347.9	10,900.0	100.9	100.5	-39.48	-5,623.1	294.4	518.2	369.0	147.01	3.525		
16,800.0	11,300.0	16,347.9	10,900.0	100.9	100.5	-39.48	-5,023.1	295.4	518.2	366.8	149.22	3.473		
10,900.0	11,300.0	10,447.9	10,900.0	102.4	102.0	-39.40	-3,123.1	290.4	510.2	300.6	101.45	3.422		
17,000.0	11,300.0	16,547.9	10,900.0	104.0	103.5	-39.48	-5,823.1	297.4	518.2	364.6	153.65	3.373		
		16,647.9		105.5	105.1	-39.48	-5,923.1	298.4	518.2	362.3	155.87	3.325		
		16,747.9		107.0	106.6	-39.48	-6,023.1	299.4	518.2	360.1	158.11	3.278		
17,300.0	11,300.0		10,900.0	107.0	108.1	-39.48	-6,123.1	300.5	518.2	357.9	160.34	3.270		
17,400.0			10,900.0	110.5	100.1	-39.48	-6,223.1	300.5	518.2	355.6	162.59	3.187		
17,400.0	11,300.0	10,341.3	10,300.0	110.1	103.1	-33.40	-0,223.1	301.3	310.Z	333.0	102.39	3.107		
17,500.0	11,300.0	17,047.9	10,900.0	111.6	111.2	-39.48	-6,323.1	302.5	518.2	353.4	164.83	3.144		
17,600.0		17,147.9		113.1	112.8	-39.48	-6,423.1	303.5	518.2	351.1	167.08	3.102		
17,700.0	11,300.0	17,247.9	10,900.0	114.7	114.3	-39.48	-6,523.1	304.5	518.2	348.9	169.34	3.060		
17,800.0	11,300.0	17,347.9		116.2	115.9	-39.48	-6,623.1	305.5	518.2	346.6	171.60	3.020		
17,900.0	11,300.0	17,447.9		117.8	117.4	-39.48	-6,723.0	306.5	518.2	344.4	173.87	2.981		
			10,000.0			00.10	0,720.0	000.0	010.2	211.1		2.001		
		47 5 47 0	10 000 0	119.3	119.0	-39.48	-6,823.0	307.5	518.2	342.1	176.14	2.942		
18,000.0	11,300.0	17,547.9	10,900.0	119.5		-33.40	-0.023.0	307.5	J10.2	J-12.1				

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COMPASS 5000.17 Build 03

.

0.0 usft

Offset Site Error:

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H
Project:	(SP) LEA	TVD Reference:	KB @ 3205.0usft
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3205.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EL CAMPEON FED STATE COM 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	OWB	Database:	Compass
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: EL CAMPEON FED COM PROJECT - EL CAMPEON FED STATE COM 152H - OWB - PWP0

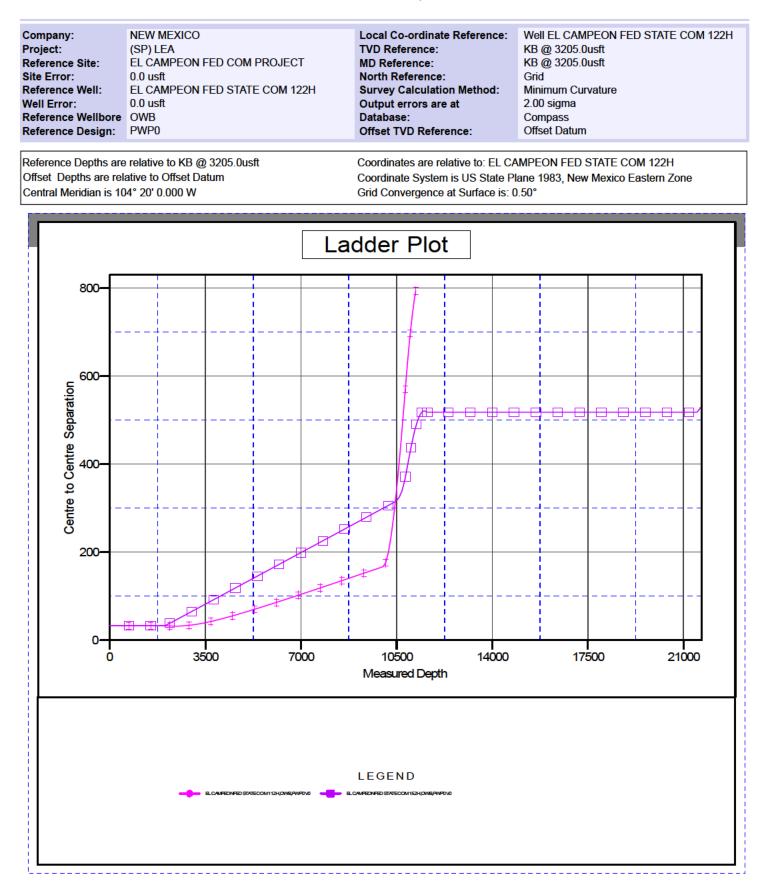
Surve			0-MWD	inat	Corri I	Anior Avia		Offeet Mellh	oro Contro	Diet	Rule Assi	gned:		Offset Well Error:	0.0 usft
Meas	Refer	vertical		set Vertical	Semi M Reference	Major Axis Offset	Highside	Offset Wellb	ore Centre		ance Between	Minimum	Separation	Warning	
Dep	pth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation			
(us	sft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
	00.0	11,300.		10,900.0	120.9	120.5	-39.48	-6,923.0	308.5	518.2	339.8	178.41	2.905		
18,2	00.0	11,300.	0 17,747.9	10,900.0	122.4	122.1	-39.48	-7,023.0	309.5	518.2	337.5	180.69	2.868		
	0.00	11,300.		10,900.0	124.0	123.7	-39.48	-7,123.0	310.5	518.2	335.2	182.97	2.832		
	0.00	11,300.		10,900.0	125.5	125.2	-39.48	-7,223.0	311.5	518.2	333.0	185.26	2.797		
	00.0	11,300.		10,900.0	127.1	126.8	-39.48	-7,323.0	312.5	518.2	330.7	187.54	2.763		
18,6	00.0	11,300.	0 18,147.9	10,900.0	128.7	128.4	-39.48	-7,423.0	313.5	518.2	328.4	189.84	2.730		
19.7	00.00	11,300.	0 18,247.9	10,900.0	130.2	129.9	-39.48	-7,523.0	314.5	518.2	326.1	192.13	2.697		
	00.0	11,300.		10,900.0	130.2	131.5	-39.48	-7,623.0	315.5	518.2	323.8	194.43	2.665		
	00.0	11,300.		10,900.0	131.0	133.1	-39.48	-7,723.0	316.5	518.2	323.0	196.73	2.634		
	00.0	11,300.		10,900.0	135.0	134.7	-39.48	-7,823.0	317.5	518.2	319.2	199.03	2.604		
	00.0	11,300.		10,900.0	136.5	136.2	-39.48	-7,923.0	318.5	518.2	316.9	201.34	2.574		
,.		11,000.	- 10,017.0	.0,000.0	100.0	100.2	00.10	1,020.0	010.0	0.0.2	010.0	201.04	2.01		
19,2	00.0	11,300.	0 18,747.9	10,900.0	138.1	137.8	-39.48	-8,023.0	319.5	518.2	314.6	203.65	2.545		
19,3	00.0	11,300.	0 18,847.9	10,900.0	139.7	139.4	-39.48	-8,123.0	320.5	518.2	312.3	205.96	2.516		
19,4	00.0	11,300.	0 18,947.9	10,900.0	141.3	141.0	-39.48	-8,223.0	321.5	518.2	309.9	208.27	2.488		
19,5	00.0	11,300.	0 19,047.9	10,900.0	142.8	142.6	-39.48	-8,323.0	322.5	518.2	307.6	210.59	2.461		
19,6	00.0	11,300.	0 19,147.9	10,900.0	144.4	144.2	-39.48	-8,423.0	323.6	518.2	305.3	212.91	2.434		
	00.0	44 000	40.047 -	40.000.0		4	00.40	0.500.5		<b>F</b> 10 <b>F</b>	000 5	045.00	0.400		
	00.0	11,300.		10,900.0	146.0	145.7	-39.48	-8,523.0	324.6	518.2	303.0	215.23	2.408		
	00.0	11,300.		10,900.0	147.6	147.3	-39.48	-8,623.0	325.6	518.2	300.7	217.55	2.382		
	00.0	11,300.		10,900.0	149.2	148.9	-39.48	-8,722.9	326.6	518.2	298.3	219.88	2.357		
	00.0	11,300.		10,900.0	150.8	150.5	-39.48	-8,822.9	327.6	518.2	296.0	222.21	2.332		
20,1	00.0	11,300.	0 19,647.9	10,900.0	152.4	152.1	-39.48	-8,922.9	328.6	518.2	293.7	224.54	2.308		
20.2	00.0	11,300.	0 19,747.9	10,900.0	153.9	153.7	-39.48	-9,022.9	329.6	518.2	291.4	226.87	2.284		
	00.0	11,300.		10,900.0	155.5	155.3	-39.48	-9,122.9	330.6	518.2	289.0	229.20	2.261		
	00.0	11,300.		10,900.0	157.1	156.9	-39.48	-9,222.9	331.6	518.2	286.7	231.54	2.238		
	00.0	11,300.		10,900.0	158.7	158.5	-39.48	-9,322.9	332.6	518.2	284.3	233.88	2.216		
	00.0	11,300.		10,900.0	160.3	160.1	-39.48	-9,422.9	333.6	518.2	282.0	236.21	2.194		
20,7	00.0	11,300.		10,900.0	161.9	161.7	-39.48	-9,522.9	334.6	518.2	279.7	238.55	2.172		
20,8	00.0	11,300.	0 20,347.9	10,900.0	163.5	163.3	-39.48	-9,622.9	335.6	518.2	277.3	240.90	2.151		
20,9	00.0	11,300.	0 20,447.9	10,900.0	165.1	164.9	-39.48	-9,722.9	336.6	518.2	275.0	243.24	2.130		
21,0	00.0	11,300.	0 20,547.9	10,900.0	166.7	166.5	-39.48	-9,822.9	337.6	518.2	272.6	245.59	2.110		
21,1	00.0	11,300.	0 20,647.9	10,900.0	168.3	168.1	-39.48	-9,922.9	338.6	518.2	270.3	247.93	2.090		
24.2	00.0	44 200	0 00 747 0	10 000 0	160.0	160 7	20.40	10,000,0	220.0	540.2	267.0	250.20	2.071		
	00.0	11,300.		10,900.0	169.9	169.7	-39.48	-10,022.9	339.6	518.2	267.9	250.28	2.071		
21,3		11,300.		10,900.0	171.5	171.3	-39.48	-10,122.9	340.6	518.2	265.6	252.63	2.051		
	00.0	11,300.		10,900.0	173.1	172.9	-39.48	-10,222.9	341.6	518.2	263.2	254.98	2.032		
	00.0	11,300.	-	10,900.0	174.7	174.5	-39.48	-10,322.9	342.6	518.2	260.9	257.33	2.014 SF		
21,6	00.0	11,300.	0 21,058.1	10,900.0	176.3	174.7	-39.48	-10,333.1	342.7	525.9	269.7	256.20	2.053		
216	15.7	11,300.	0 21,058.1	10,900.0	176.6	174.7	-39.48	-10,333.1	342.7	528.9	273.6	255.30	2.071		
			21,000.1				55.15		0.2.1	020.0	2.0.0	200.00	2.011		

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

0.0 usft

Offset Site Error:

Anticollision Report



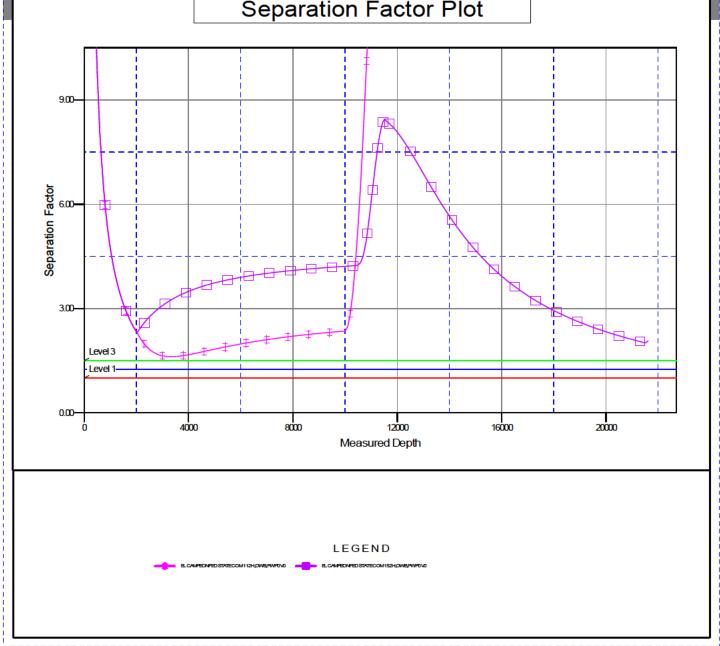
CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

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COMPASS 5000.17 Build 03

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well EL CAMPEON FED STATE COM 122H				
Project:	(SP) LEA	TVD Reference:	KB @ 3205.0usft				
Reference Site:	EL CAMPEON FED COM PROJECT	MD Reference:	KB @ 3205.0usft				
Site Error:	0.0 usft	North Reference:	Grid				
Reference Well:	EL CAMPEON FED STATE COM 122H	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 @ 3205.0usft       Coordinates are relative to: EL CAMPEON FED STATE COM 122H         Offset Depths are relative to Offset Datum       Coordinate System is US State Plane 1983, New Mexico Eastern Zone         Central Meridian is 104° 20' 0.000 W       Grid Convergence at Surface is: 0.50°							
	Separa	tion Factor Plot					



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



H<sub>2</sub>S CONTINGENCY PLAN

FOR

Permian Resources Corporation El Campeon Fed 111H, 121H, 151H Lea County, New Mexico

> 07-02-2024 This plan is subject to updating

Received by OCD: 4/2/2025 8:19:47 PM

Permian Resources Corporation	H <sub>2</sub> S Contingency Plan	Lea County, New Mexico
	El Campeon Fed 111H, 121H, 151H	

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Section 1.0 – Introduction

.

Permian Resources Corporation	H <sub>2</sub> S Contingency Plan	Lea County, New Mexico
	El Campeon Fed 111H, 121H, 151H	

#### I. Purpose

The purpose of this contingency plan (Plan) is to provide Permian Resources Corporation. (Permian Resources) with an organized plan of action for alerting and protecting Permian Resources employees, the general public, and any potential first responders prior to any intentional release or immediately following the accidental / unintentional release of a potentially hazardous volume / concentration of Hydrogen Sulfide Gas (H2S).

#### II. Scope & Applicability

This Plan applies to all planned, unplanned, uncontrolled and/or unauthorized releases of hazardous concentrations of H<sub>2</sub>S or any associated hazardous byproducts of combustion, occurring at any Permian Resources owned or operated facilities including but not limited to: wells, flowlines, pipelines, tank batteries, production facilities, SWD facilities, compressor stations, gas processing plants, drilling / completions / workover operations, and any other applicable company owned property.

#### Section 2.0 - Plan Implementation

#### I. Activation Requirements

In accordance with the requirements of Bureau of Land Management Onshore Order #6 and NMAC 19.15.11, this Plan shall be activated in advance of any authorized, planned, unplanned, uncontrolled, or unauthorized release of a hazardous volume / concentration of H<sub>2</sub>S gas, or SO<sup>2</sup>, which could potentially adversely impact the workers, general public or the environment.

#### II. Emergency Evacuation

In the event of an unplanned, uncontrolled, or unauthorized release of a hazardous volume / concentration of  $H_2S$  gas, the first priority is to ensure the safety of the workers and general public. Upon discovery and subsequent determination of an applicable release, which cannot be quickly mitigated, immediately by using 911, notify local authorities to begin the process of alerting the general public, evacuate any residents within the Radius of Exposure (ROE), and limit any general public or employee access to any areas within the ROE of the affected facility.

#### III. Emergency Response Activities

The purpose of emergency response actions is to take steps to quickly mitigate / stop the ongoing release of the hazardous source of  $H_2S$ . Upon discovery of any hazardous release, immediately notify Permian Resources management to activate the Emergency Response Team (ERT). Once Permian Resources supervision arrives and assesses the situation, a work plan identifying the proper procedures shall be developed to stop the release.

#### Section 3.0 - Potential Hazardous Conditions & Response Actions

During a planned or unplanned release of H<sub>2</sub>S, there are several hazardous conditions that are presented both to employees, the general public, and emergency responders. These specific hazardous conditions are identified in the tables below.

Permian Resources Corporation	H <sub>2</sub> S Contingency Plan	
	El Campeon Fed 111H, 121H, 151H	

H2S OPERATING CONDITIONS – RESPONSE ACTIONS TO CONSIDER	√
H <sub>2</sub> S CONDITION 1: POTENTIAL DANGER TO LIFE AND HEALTH -> WARNING SI GREEN	GN
H <sub>2</sub> S concentration <10 ppm detected by location monitors	
General Actions During Condition 1	
Notify Site Supervisor / Permian Resources Person-in-Charge (PIC) of any observed increase in ambient H <sub>2</sub> S concentrations	
All personnel check safety equipment is in adequate working order & store in accessible location	
Sensitize crews with safety meetings.	
Limit visitors and non-essential personnel on location	
Continuously monitor H <sub>2</sub> S concentrations and check calibration of sensors	
Ensure H <sub>2</sub> S scavenger is on location.	
H₂S CONDITION 2: MODERATE DANGER TO LIFE AND HEALTH → WARNING SIGN YELLOW	
$H_2S$ concentration >10 ppm and < 30 ppm in atmosphere detected by location monitors:	
General Actions During Condition 2	
Sound H <sub>2</sub> S alarm and/or display yellow flag.	
Account for on-site personnel	
Upon sounding of an area or personal H <sub>2</sub> S monitor alarm when 10 ppm is reached, proceed to a safe briefing area upwind of the location immediately (see MA-4, Figure 5-1).	
Don proper respiratory protection.	
Alert other affected personnel	
If trained and safe to do so undertake measures to control source H2S discharge and eliminate possible ignition sources. Initiate Emergency Shutdown procedures as deemed necessary to correct or control the specific situation.	
Account for on-site personnel at safe briefing area.	
Stay in safe briefing area if not working to correct the situation.	
Keep Site Supervisor / Permian Resources PIC informed. Notify applicable government agencies <b>(Appendix A)</b> If off-site impact; notify any neighbors within Radius of Exposure <b>(ROE)</b> , <b>Fig 5.11</b>	
Continuously monitor H <sub>2</sub> S until readings below 10 ppm.	
Evacuated area shall not be re-entered except by trained and authorized personnel utilizing appropriate respiratory protection; or until "all clear" sounded by Permian Resources PIC / Site Supervisor.	

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Permian Resources Corporation

n Resources Corporation	H <sub>2</sub> S Contingency Plan El Campeon Fed 111H, 121H, 151H	Lea County, New Mexi
	· · · ·	
	DANGER TO LIFE AND HEALTH $ ightarrow$ Warning	
	a air detected by location monitors: Extreme	e danger to life
General Actions During Con	dition 3	
Sound H <sub>2</sub> S alarm and/or displa	y red flag.	
Account for on-site personnel		
Move away from H <sub>2</sub> S source as	nd get out of the affected area.	
Proceed to designated safe brie	fing area; alert other affected personnel.	
Account for personnel at safe b	oriefing area.	
	ertake measures to control source H2S disc sources. Initiate Emergency Shutdown proo trol the specific situation.	
Notify vehicles or situation and	l divert all traffic away from location.	
Permian Resources Peron-in-C	harge will make appropriate community no	tifications.
	lisplay until the situation has been corrected ge determines it is safe to resume operations	
steps to correct the situation questionable – alert all resp	dition and action taken. If $H_2S$ concentration n are not successful – or at any time if well ponsible parties for possible activation of the surface is lost, determine if situation warrar	control is e H <sub>2</sub> S Contingency
possible, from those coordi <b>Contingency Plan)</b> are res flow of the uncontrolled we	ace occurs, the Permian Resources PIC, wit inating the emergency (as specified in the s ponsible for determining if the situation wa ell. This decision should be made only as a is that human life is in danger and there is n prevailing conditions.	site-specific H <sub>2</sub> S rrants igniting the last resort and in a
highly toxic. Do not assum	$H_2S$ will be converted to sulfur dioxide (SO) that area is safe after the flow is ignited. If the is mandatory, because SO <sub>2</sub> will remain titions.	f the well is
	n Resources PIC informed. agencies and local law enforcement <b>(Apper</b> eighbors within the Radius of Exposure <b>(RC</b>	
Continuously monitor H <sub>2</sub> S unti	l readings fall below 10 ppm.	
	entered except by trained and authorized pe tection; or until "all clear" sounded by Pern	
IF ABOVE ACTIONS CANN EXPOSURE TO THE PU	NOT BE ACCOMPLISHED IN TIME TO JBLIC	O PREVENT
Alert public (directly or throug potentially harmful exposu	h appropriate government agencies) who m re levels.	ay be subject to
Make recommendations to pub unsafe area and assist as ap	lic officials regarding blocking unauthorize propriate.	d access to the

Permian Resources Corporation	H <sub>2</sub> S Contingency Plan El Campeon Fed 111H, 121H, 151H	Lea County, New Mexico	
Make recommendations to pub appropriate.	lic officials regarding evacuating the public		

Monitor ambient air in the area of exposure (after following abatement measures) to determine when it is safe for re-entry.

#### Section 4.0 - Notification of H<sub>2</sub>S Release Event

#### I. Local & State Law Enforcement

Prior to the planned / controlled release of a hazardous concentration of  $H_2S$  gas or any associated byproducts of the combustion of  $H_2S$  gas, notify local law enforcement agencies regarding the contents of this plan.

In the event of the discovery of an unplanned/uncontrolled release of a hazardous concentration of  $H_2S$  gas or any associated byproducts of combustion, immediately notify local and/or state law enforcement agencies of the situation and ask for their assistance.

#### II. General Public

In the event of a planned or unplanned release of a hazardous concentration of H<sub>2</sub>S gas or any associated byproducts of combustion, notify local law enforcement agencies and ask for their assistance in alerting the general public and limiting access to any public roads that may be impacted by such a release.

#### III. New Mexico Oil Conservation Division

The Permian Resources HSE Department will make any applicable notification to the New Mexico OCD regarding any release of a hazardous concentration of  $H_2S$  Gas or any associated byproducts of combustion.

#### IV. New Mexico Environment Department

The Permian Resources HSE Department will make any applicable notifications to the NMED regarding any release of a hazardous concentration of  $H_2S$  gas or any associated byproducts of combustion.

#### V. Bureau of Land Management

The Permian Resources Regulatory Department will make any applicable notifications to the BLM regarding any release of a hazardous concentration of  $H_2S$  gas or any associated byproducts of combustion.

#### Section 5.0 - Emergency Contact List

# EMERGENCY CONTACT LIST

#### PERMIAN RESOURCES CORPORATION.

Permian Resources Corporation	H <sub>2</sub> S Contingency Plan	Lea County, New Mexico
	El Campeon Fed 111H 121H 151H	

POSITION	NAME	OFFICE	CELL	ALT PHONE	
Operations					
Production Superintendent	Rick Lawson		432.530.3188		
TX Production Superintendent	Josh Graham	432.940.3191	432.940.3191		
NM Production Superintendent	Manual Mata	432.664.0278	575.408.0216		
Drilling Manager	Jason Fitzgerald	432.315.0146	318.347.3916		
Drilling Engineer	Parker Simmons	432.400.1038	281.536.9813		
Production Manager	Levi Harris	432.219.8568	720.261.4633		
SVP Development Ops	Clayton Smith	720.499.1416	361.215.2494		
SVP Production Ops	Casey McCain	432.695.4239	432.664.6140		
HSE & Regulatory					
H&S Manager	Adam Hicks	720.499.2377	903.426.4556		
Regulatory Manager	Stephanie Rabadue		432.260.4388		
Environmental Manager	Montgomery Floyd	432-315-0123	432-425-8321		
HSE Consultant	Blake Wisdom		918-323-2343		
l	ocal, State, & F	ederal Agend	cies		
Lea County Sheriff		575-396-3611		911	
New Mexico State Highway Patrol		505-757-2297		911	
Eunice Fire / EMS		575-394-3258		911	
Lea County Hospital		575-492-5000			
Secorp – Safety Contractor	Ricky Stephens		(325)-262-0707		
New Mexico Oil Conservation Division – District 1 Office – Hobbs, NM.		575-393-6161			
New Mexico Environment Department – District III Office – Hobbs, NM		575-397-6910			
New Mexico Oil Conservation Division — Hobbs, NM	24 Hour Emergency	575-393-6161			
Bureau of Land Management – Carlsbad, NM		575-706-2779			
Lea County PET Inspector		575-689-5981			
U.S. Fish & Wildlife		502-248-6911			

#### Section 6.0 – Drilling Location Information

#### I. Site Safety Information

- 1. Safe Briefing Area
  - a. There shall be two areas that will be designated as "SAFE BRIEFING AREAs". If H<sub>2</sub>S is detected in concentrations equal to or in excess of 10 ppm all personnel not assigned emergency duties are to assemble in the designated Safe Briefing area for instructions. These two areas shall be positioned in accessible locations to facilitate the availability of self-contained breathing air devices. The briefing areas shall be positioned no less than 250' from the wellhead and in such locations that at least one briefing area will be upwind from the well at all times.

#### 2. Wind Indicators

a. 4 Windsocks will be installed at strategic points on the facility.

- 3. Danger Signs
  - a. A warning sign indicating the possible well conditions will be displayed at the location entrance.

#### DANGER POISONOUS GAS HYDROGEN SULFIDE DO NOT APPROACH IF AMBER LIGHTS ARE FLASHING

#### 4. <u>H<sub>2</sub>S Detectors and Alarms</u>

a. Continuous monitoring type H<sub>2</sub>S detectors, capable of sensing a minimum of 5ppm H<sub>2</sub>S in air will be located centrally located at the tanks, heater treater, and combustor. Continuous monitoring type SO<sub>2</sub> detector will also be located at the combustor. The automatic H<sub>2</sub>S alarm/flashing light will be located at the site entrance and in front of tank battery.

#### 5. <u>Safety Trailer</u>

a. A safety trailer equipped with an emergency cascade breathing air system with 2 ea. Work/escape packs, a stretcher, 2 OSHA approved full body harnesses, and a 20# Class ABC fire extinguisher shall be available at the site in close proximity to the safe briefing area. The cascade system shall be able to be deployed to the drill floor when needed to provide safe breathing air to the workers as needed.

#### 6. <u>Well Control Equipment</u>

- a. The location shall have a flare line to a remote automatic ignitor and back up flare gun, placed 150' from the wellhead.
- b. The location shall be equipped with a remotely operated choke system and a mud gas separator.

#### 7. Mud Program

a. Company shall have a mud program that contains sufficient weight and additives to control  $H_2S$ .

#### 8. Metallurgy

a. All drill strings, casing, tubing, wellhead, BOP, spools, kill lines, choke manifold and lines, and valves shall be suitable for anticipated H<sub>2</sub>S volume and pressure.

#### 9. Communication

a. The location shall be equipped with a means of effective communication such as a cell phones, intercoms, satellite phones or landlines.

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# II. Directions to Location

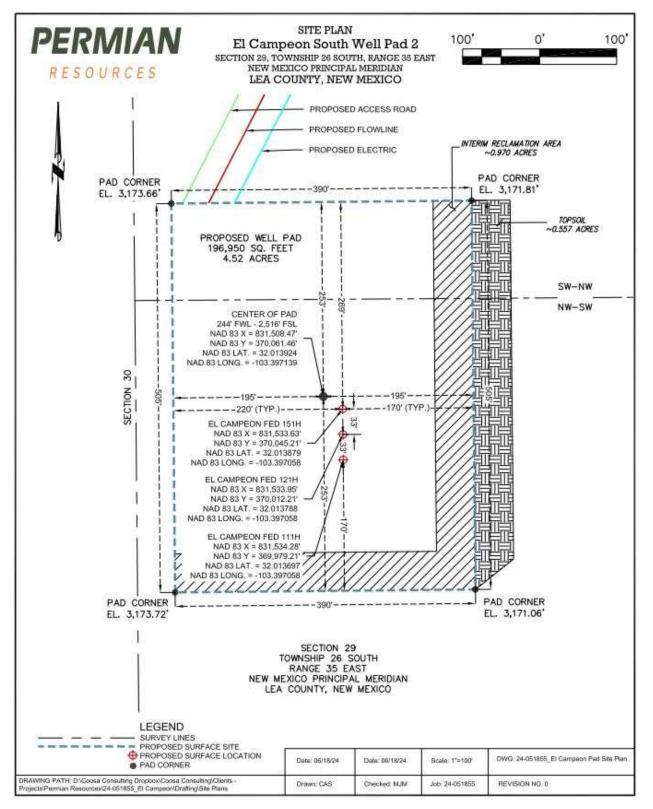
FROM THE INTERSECTION OF CR-C3 AND WHITWORTH DR. IN JAL, NEW MEXICO

1. MOVE SOUTHWEST ON CR-C3 APPROX.7 MILES.

- 2. KEEP RIGHT ONTO NM-322 AND CONTINUE MOVE SOUTHWEST APPROX. 2742 FEET.
- 3. TURN RIGHT ONTO BECKHAM RD. AND MOVE WEST APPROX. 2 MILES.
- 4. KEEP LEFT ONTO LEASE ROAD AND CONTINUE MOVE WEST APPROX. 3 MILES.
- 5. TURN RIGHT AND MOVE NORTH APPROX. 2174 FEET.
- 6. TURN LEFT AND MOVE WEST APPROX. 3 MILES.
- 7. TURN LEFT AND MOVE SOUTH APPROX. 1 MILES.
- 8. TURN RIGHT AND MOVE WEST APPROX. 737 FEET.
- 9. TURN LEFT ONTO ACCESS ROAD AND MOVE COUTH APPROX. 641 FEET TO SOUTH EAST PAD CORNER

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Plat of Location



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1. Routes of Ingress & Egress (MAP)

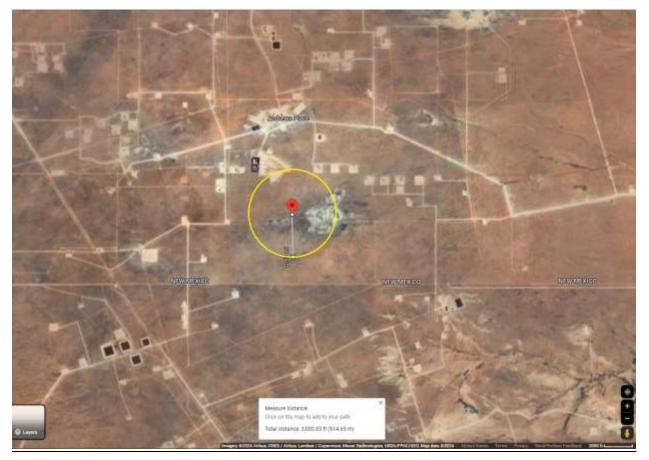


2. Residences in proximity to the 3000' Radius of Exposure (ROE) (MAP)

There are no residences or public gathering places with the 3000' ROE, 100 PPM, 300 PPM, or 500 PPM ROE.

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# Map of 3000' ROE Perimeter



# 100 PPM, 300 PPM, & 500 PPM Max ROE under worst case scenario

Enter H <sub>2</sub> S in PPM	1500	
Enter Gas flow in mcf/day (maximum worst case conditions)	2500	
500 ppm radius of exposure (public road)	<u>105</u>	feet
300 ppm radius of exposure	<u>146</u>	feet
100 ppm radius of exposure (public area)	<u>230</u>	feet

- Location NAD 83 GPS Coordinates Lat: 32.013924, Long: -103.397139
- 3. Public Roads in proximity of the Radius of Exposure (ROE)

There are no public roads that would be within the 500 PPM ROE. The closest public road is New Mexico Road 3, which is 7.8 miles from the location.

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# Section 7.0 – Hazard Communication

# I. Physical Characteristics of Hydrogen Sulfide Gas

Hydrogen sulfide (H<sub>2</sub>S) is a colorless, poisonous gas that is soluble in water. It can be present in crude oils, condensates, natural gas and wastewater streams.

 $H_2S$  is heavier than air with a vapor density of 1.189 (air = 1.0); however,  $H_2S$  is most often mixed with other gases. These mixtures of  $H_2S$  and other gases can be heavier or lighter than air. If the  $H_2S$ -containing mixture is heavier, it can collect in low areas such as ditches, ravines, firewalls, and pits; in storage tanks; and in areas of poor ventilation. Please see physical properties in Table 7.0.

With  $H_2S$  the sense of smell is rapidly lost allowing lethal concentrations to be accumulated without warning. The toxicity of hydrogen sulfide at varying concentrations is indicated in the Table 7.1.

**Warning:** Do not use the mouth-to-mouth method if a victim ingested or inhaled hydrogen sulfide. Give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

# Table 7.0. Physical Properties of H<sub>2</sub>S

Properties of H2S	Description
Vapor Density > 1 = 1.189 Air = 1	<ul> <li>H2S gas is slightly heavier than air, which can cause it to settle in low places and build in concentration.</li> <li>Produced as a mixture with other gases associated with oil and gas production.</li> </ul>
Flammable Range 4.3%-46% 43000 ppm – 460000 ppm	<ul> <li>H2S can be extremely flammable / explosive when these concentrations are reached by volume in air.</li> </ul>

Although  $H_2S$  is primarily a respiratory hazard, it is also flammable and forms an explosive mixture at concentrations of 4.3%–46.0% (40,000ppm – 460,000 ppm) by volume in air.

# H<sub>2</sub>S can be encountered when:

- Venting and draining equipment.
- Opening equipment (separators, pumps, and tanks).
- Opening piping connections ("line breaking").
- Gauging and sampling storage tanks.
- Entering confined spaces.
- Working around wastewater pits, skimmers, and treatment facilities.
- II. Human Health Hazards Toxicological Information

# Table 7.1. Hazards & Toxicity

Concentration	Symptoms/Effects
(ppm)	

Permian Resources Corporation	H <sub>2</sub> S Contingency Plan	Lea County, New Mexico
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0.00011-0.00033 ppm	Typical background concentrations
0.01-1.5 ppm	Odor threshold (when rotten egg smell is first noticeable to some). Odor becomes more offensive at 3-5 ppm. Above 30 ppm, odor described as sweet or sickeningly sweet.
2-5 ppm	Prolonged exposure may cause nausea, tearing of the eyes, headaches or loss of sleep. Airway problems (bronchial constriction) in some asthma patients.
20 ppm	Possible fatigue, loss of appetite, headache, irritability, poor memory, dizziness.
50-100 ppm	Slight conjunctivitis ("gas eye") and respiratory tract irritation after 1 hour. May cause digestive upset and loss of appetite.
100 ppm	Coughing, eye irritation, loss of smell after 2-15 minutes (olfactory fatigue). Altered breathing, drowsiness after 15-30 minutes. Throat irritation after 1 hour. Gradual increase in severity of symptoms over several hours. Death may occur after 48 hours.
100-150 ppm	Loss of smell (olfactory fatigue or paralysis).
200-300 ppm	Marked conjunctivitis and respiratory tract irritation after 1 hour. Pulmonary edema may occur from prolonged exposure.
500-700 ppm	Staggering, collapse in 5 minutes. Serious damage to the eyes in 30 minutes. Death after 30-60 minutes.
700-1000 ppm	Rapid unconsciousness, "knockdown" or immediate collapse within 1 to 2 breaths, breathing stops, death within minutes.
1000-2000 ppm	Nearly instant death

# III. Environmental Hazards

H<sub>2</sub>S and its associated byproducts from combustion presents a serious environmental hazard. Sulphur Dioxide SO<sub>2</sub> is produced as a constituent of flaring H<sub>2</sub>S Gas and can present hazards associated, which are similar to H<sub>2</sub>S. Although SO<sub>2</sub> is heavier than air, it will be picked up by a breeze and carried downwind at elevated temperatures. Since Sulfur Dioxide is extremely irritating to the eyes and mucous membranes of the upper respiratory tract, it has exceptionally good warning powers in this respect. The following table indicates the toxic nature of the gas. Please see the attached SDS in Appendix B for reference.

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SULFUR DIOXIDE TOXICITY		
Concentration		Effects
%SO <sub>2</sub>	PPM	
0.0005	3 to 5	Pungent odor-normally a person can detect SO <sub>2</sub> in this range.
0.0012	12	Throat irritation, coughing, and constriction of the chest tearing and smarting of eyes.
0.15	150	So irritating that it can only be endured for a few minutes.
0.05	500	Causes a sense of suffocation, even with first breath.

# Section 8.0 - Regulatory Information

I. OSHA & NIOSH Information

# II. Table 8.0. OSHA & NIOSH H<sub>2</sub>S Information

PEL, IDLH, TLV	Description		
NIOSH PEL 10 PPM	<ul> <li>PEL is the Permissible Exposure Limit that an employee may be exposed up to 8 hr / day.</li> </ul>		
OSHA General Industry Ceiling PEL – 20 PPM	<ul> <li>The maximum exposure limit, which cannot be exceeded for any length of time.</li> </ul>		
IDLH 100 PPM	<ul> <li>Immediately Dangerous to Life and Health</li> </ul>		
Permian Resources PEL 10 PPM	<ul> <li>Permian Resources Policy Regarding H2S for employee safety</li> </ul>		

# III. New Mexico OCD & BLM - H<sub>2</sub>S Concentration Threshold Requirements

New Mexico NMAC 19.15.11 and Onshore Order #6 identify two Radii of Exposure (ROE) that identify potential danger to the public and require additional compliance measures. Permian Resources is required to install safety devices, establish safety procedures and develop a written  $H_2S$  contingency plan for sites where the  $H_2S$  concentrations are as follows.

H₂S Radius of Exposure	Description	Control and Equipment Requirements
100 ppm	Distance from a release to where the H <sub>2</sub> S concentration in the air will dilute below 100ppm	ROE > 50-ft and includes any part of a "public area" (residence, school, business, etc., or any area that can be expected to be populated). ROE > 3,000-ft
500 ppm	Distance from a release to where the H <sub>2</sub> S concentration in the air will dilute below 500ppm	ROE > 50-ft and includes any part of a public road (public roads are tax supported roads or any road used for public access or use)

## Calculating H<sub>2</sub>S Radius of Exposure

Permian Resources Corporation	H <sub>2</sub> S Contingency Plan	Lea County, New Mexico
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The ROE of an H<sub>2</sub>S release is calculated to determine if a potentially hazardous volume of H<sub>2</sub>S gas at 100 or 500 parts per million (ppm) is within a regulated distance requiring further action. If information about the concentration of H<sub>2</sub>S and the potential gas release volume is known, the location of the Muster Areas will be set, and safety measures will be implemented based on the calculated radius of exposure (ROE). NMAC 19.15.11 – Hydrogen Sulfide Safety defines the ROE as the radius constructed with the gas's point of escape as its center and its length calculated by the following Pasquill-Gifford equations:

To determine the extent of the 100 ppm ROE:

 $x = [(1.589) \text{ (mole fraction H}_2S)(Q)]^{(.6258)}$ .

To determine the extent of the 500 ppm ROE:

 $x = [(0.4546) \text{ (mole fraction H}_2S)(Q)]^{(.6258)}$ .

# Table 8.2. Calculating H2S Radius of Exposure

ROE Variable	Description
X =	ROE in feet
Q =	Max volume of gas released determined to be released in cubic feet per day (ft³/d) normalized to standard temperature and pressure, 60°F and 14.65 psia
Mole fraction H₂S =	Mole fraction of H <sub>2</sub> S in the gaseous mixture released.

The volume used as the escape rate in determining the ROE is specified in the rule as follows:

- The maximum daily volume rate of gas containing H<sub>2</sub>S handled by that system element for which the ROE is calculated.
- For existing gas wells, the current adjusted open-flow rate, or the operator's estimate of the well's capacity to flow against zero back-pressure at the wellhead.

# New Mexico Oil Conservation Division & BLM Site Requirements under NMAC 19.15.11 & Onshore Order #6

- Two cleared areas will be designated as Safe Briefing Areas. During an emergency, personnel will
  assemble in one of these areas for instructions from the Permian Resources Person-in-Charge.
  Prevailing wind direction should be considered in locating the briefing areas 200' or more on either
  side of the well head. One area should offset the other at an angle of 45° to 90° with respect to
  prevailing wind direction to allow for wind shifts during the work period.
- In the event of either an intentional or accidental releases of hydrogen sulfide, safeguards to protect the general public from the harmful effects of hydrogen sulfide must be in place for operations. A summary of the provisions in each of three H<sub>2</sub>S ROE cases is included in Table 8.3.
  - CASE 1 -100 ppm ROE < 50'</li>
  - CASE 2 100 ppm ROE is 50' or greater, but < 3000' and does not penetrate public area.
  - CASE 3 -100 ppm ROE is 50' or greater and penetrates a public area or 500 ppm ROE includes a
    public road. Also if 100 ppm ROE > 3000' regardless of public area.

# Table 8.3. NMAC 19.15.11 Compliance Requirements Drilling & Production

NMAC 19.15.11 & BLM COMPLIANCE REQUIREMENTS - DRILLING & PRODUCTION

Permian Resources Corporation	H <sub>2</sub> S Contingency Plan	Lea County, New Mexico
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PROVISION	CASE 1	CASE 2	CASE 3
H <sub>2</sub> S Concentration Test	Х	Х	Х
Н-9	X	X	X
Training	X	X	X
District Office Notification	Х	Х	X
Drill Stem Tests Restricted	X*	X*	X
BOP Test	X*	X*	X
Materials		X	X
Warning and Marker		X	X
Security		X	X
Contingency Plan			X
Control and Equipment Safety			X
Monitors		X**	X**
Mud (ph Control or Scavenger)			X*
Wind Indicators		X**	X
Protective Breathing Equipment		X**	X
Choke Manifold, Secondary Remote Control, and Mud-Gas Separator			X
Flare Stacks			X*

# Section 9.0 - Training Requirements

# Training

The following elements are considered a minimum level of training for personnel assigned to operations who may encounter H<sub>2</sub>S as part of routine or maintenance work.

- The hazards, characteristics, and properties of hydrogen sulfide (H<sub>2</sub>S) and (SO<sub>2</sub>).
- Sources of H<sub>2</sub>S and SO<sub>2</sub>.
- Proper use of H<sub>2</sub>S and SO<sub>2</sub> detection methods used at the workplace.
- Recognition of, and proper response to, the warning signals initiated by H<sub>2</sub>S and SO<sub>2</sub> detection systems in use at the workplace.
- Symptoms of H<sub>2</sub>S exposure; symptoms of SO<sub>2</sub> exposure
- Rescue techniques and first aid to victims of H<sub>2</sub>S and SO<sub>2</sub> exposure.
- Proper use and maintenance of breathing equipment for working in H<sub>2</sub>S and SO<sub>2</sub> atmospheres, as appropriate theory and hands-on practice, with demonstrated proficiency (29 CFR Part 1910.134).
- Workplace practices and relevant maintenance procedures that have been established to protect personnel from the hazards of H<sub>2</sub>S and SO<sub>2</sub>.
- Wind direction awareness and routes of egress.
- Confined space and enclosed facility entry procedures (if applicable).
- Emergency response procedures that have been developed for the facility or operations.
- Locations and use of safety equipment.
- Locations of safe briefing areas.

Refresher training will be conducted annually.

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# Section 10.0 - Personal Protective Equipment

# I. <u>Personal H<sub>2</sub>S Monitors</u>

All personnel engaged in planned or unplanned work activity to mitigate the release of a hazardous concentration of H<sub>2</sub>S shall have on their person a personal H2S monitor.

- II. Fixed H<sub>2</sub>S Detection and Alarms
  - 4 channel H<sub>2</sub>S monitor
  - 4 wireless H<sub>2</sub>S monitors
  - H<sub>2</sub>S alarm system (Audible/Red strobe)
  - Personal gas monitor for each person on location
  - Gas sample tubes

# III. Flame Resistant Clothing

All personnel engaged in planned or unplanned work activity associated with this Plan shall have on the appropriate level of FRC clothing.

# IV. <u>Respiratory Protection</u>

The following respiratory protection equipment shall be available at each drilling location.

- Working cascade system available on rig floor and pit system & 750' of air line hose
- Four (4) breathing air manifolds
- Four (4) 30-minute rescue packs
- Five (5) work/Escape units
- Five (5) escape units
- One (1) filler hose for the work/escape/rescue units

Supplied air (airline or SCBA) respiratory protection against hydrogen sulfide exposure is required in the following situations:

- When routine or maintenance work tasks involve exposure to H<sub>2</sub>S concentrations of 10 ppm or greater.
- When a fixed location area monitor alarms, and re-entry to the work area is required to complete a job.
- When confined spaces are to be entered without knowledge of H<sub>2</sub>S levels present, or if initial measurements are to be taken of H<sub>2</sub>S levels.
- During rescue of employees suspected of H<sub>2</sub>S overexposure.
- For specific tasks identified with significant exposure potential and outlined in local program guidelines.
- All respiratory equipment for hydrogen sulfide must be of the supplied-air type, equipped with pressure-demand regulators and operated in the pressure-demand mode only. This is the only type of respiratory protection recommended for hydrogen sulfide application. Equipment should be approved by NIOSH/MSHA or other recognized national authority as required. If airline units are used, a five-minute egress bottle should also be carried.
- Gas masks or other air-purifying respirators MUST NEVER BE USED FOR HYDROGEN SULFIDE due to the poor warning properties of the gas.
- Use of respiratory protection should be accompanied by a written respiratory protection program.

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# Appendix A H<sub>2</sub>S SDS



Hydrogen sulfide Safety Data Sheet E-4611 according to the Hažardous Products Regulation (February 11, 2015) Date of issue: 10-15-1979 Revision date: 08-10-2016 Su Supersedes: 10-15-2013

	ION 1: Identification	20.
1.1	Product identifier	
Produc	t form	: Substance
Name		: Hydrogen sulfide
CAS N		7783-06-4
Formul	20- a trade - denne a service a s	: H2S
2.5	neans of identification	: Hydrogen sulfide
	t group	: Core Products
1.2		and restrictions on use
Recom	mended uses and restric	tions : Industrial use Use as directed
1.3	Supplier	
1200 Mississ T 1-900	Canada inc. 1 City Centre Drive auga - Canada L5B 1M3 - 503-1600 - F 1-905-80 raxair.ca	
1.4.	Emergency telephor	10 number
	ency number	: 1-800-363-0042 Call emergency number 24 hours a day only for spills, leaks, fire, exposure, or accidents involving this product. For routine information, contact your supplier or Praxair sales representative.
SECT	ION 2: Hazard ide	ntification
	ION 2: Hazard Ide	
2/1.	Classification of the	ntification substance or mixture
2/1. GHS-C	Classification of the A classification	substance or mixture
2/1. GHS-C Flam. C Liquefit Acute 1	Classification of the A classification Sas 1 ed gas fox. 2 (Inhalation: gas)	
2/1. GHS-C Flam. C Liquefit Acute 1 STOT 1	Classification of the A classification ias 1 ed gas fox. 2 (Inhalation: gas) SE 3	substance or mixture H220 H330 H335
2/1. GHS-C Flam. C Liquefit Acute 1 STOT 1	Classification of the A classification ias 1 ed gas fox. 2 (Inhalation: gas) SE 3	substance or mixture H220 H280 H330
2.1. GHS-C Flam. C Liquefie Acute 1 STOT 1 2.2.	Classification of the A classification ias 1 ed gas fox. 2 (Inhalation: gas) SE 3	substance or mixture H220 H330 H335
2/1. GHS-C Flam. C Liquefie Acute 1 STOT 1 2.2. GHS-C	Classification of the A classification digas cox. 2 (Inhalation: gas) SE 3 GHS Label elements	H220 H330 H336 Including precautionary statements
2/1. GHS-C Flam. C Liquefit Acute 1 STOT 1 2.2. GHS-C	Classification of the A classification sas 1 ed gas cox. 2 (Inhalation: gas) SE 3 GHS Label elements A labelling pictograms	substance or mixture H220 H330 H335
2/1. GHS-C Flam, C Liquefie Acute 1 STOT 1 Z.2. GHS-C Hazard Signal 1	Classification of the A classification sas 1 ed gas cox. 2 (Inhalation: gas) SE 3 GHS Label elements A labelling pictograms	substance or mixture H220 H330 H335 Including precautionary statements $I = \underbrace{O(I)}_{O(I)} \underbrace{O(I)}_{O(I)}$

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EN (English)

SDS ID . E-4611

Permian Resources Corporation			H <sub>2</sub> S Contingency Plan		Lea County, New Mexico		
			El Campeon Fed 111H, 121H, 151H				
	<b>PRAXAIR</b>	according to the Hazardous Produ	E-4611 ucts Regulation (Februa				
		Date of issue: 10-15-1979	Revision date: 08-10-20	no supersedes	: 10-15-2013		
		Avoid release to t Wear protective g protection Leaking gas fire: In case of leakag Store locked up Dispose of conter Protect from suni Close valve after Do not open valv When returning c	ly outdoors or in a we the environment gloves, protective clot Do not extinguish, un e, eliminate all ignition	hing, eye protection, less leak can be sto n sources dance with containe mptrature exceeds t empty quipment prepared t ht valve outlet cap o	r Supplier/owner instructions 52°C (125°F) for use		
	2.3. Other hazards						
	Other hazards not contributing to the classification	: Contact with liqui	d may cause cold bur	ns/frostbite.			
	2.4. Unknown acute toxicity (GHS	5-CA)					
	No data available						
	SECTION 3: Composition/infor	mation on ingredients	No data available SECTION 3: Composition/information on ingredients				
	3.1 Substances						
	3.1. Substances	CAS No		Common Name (sy	monymes)		
	Name Hydrogen sulfide	CAS No. (CAS No; 7783-06-4	% (Vol.)		/ Hydrogen sulphide / Sulfur hydride /		
	Name Hydrogen suffide (Main constituent)		% (Vol.)	Hydrogen sulfide (H2S)	the second state of the se		
	Name Hydrogen suffide (Man constituent) 3.2. Mixtures		% (Vol.)	Hydrogen sulfide (H2S)	/ Hydrogen sulphide / Sulfur hydride /		
	Name Hydrogen suffide (Man construent) 3.2 Mostures Not applicable	(CAS No) 7783-06-4	% (Vol.)	Hydrogen sulfide (H2S)	/ Hydrogen sulphide / Sulfur hydride /		
	Name Hydrogen sulfide (Main constituent) 3.2 Mixtures Not applicable SECTION 4: First-aid measures	ICAS Noi 7783-06-4	% (Vol.)	Hydrogen sulfide (H2S)	/ Hydrogen sulphide / Sulfur hydride /		
	Name Hydrogen suffide (Man construent) 3.2 Mostures Not applicable	ICAS Noi 7783-06-4	% (Vol.) 100	Hydrogen sulfide (H2S) Sulfureted hydrogen / C	/ Hydrogen sulphide / Sulfur hydride /		
	Name           Hydrogen sulfide (Main constituent)           3.2         Mixtures           Not applicable           SECTION 4: First-aid measures           4.1         Description of first aid measures	ICAS Noi 7783-06-4	% (Vol.) 100 II air and keep at rest in iration. If breathing is suse frostbite. For exp o exceed 105°F (41°C in warming for at leas	Hydrogen sulfide (H2S) Sulfuneted hydrogen / C a position comforta difficult, trained per sosure to liquid, imm ), 10 arter temperatu ti 10 minutes exposure f massive exposure	// Hydrogen sulphide / Sulfur hydride / Jihydrogen sulphide / Hydrogensulfide ble for breathing. If not breathing, sonnel should give oxygen. Call a ediately warm frostbite area with re should be tolerable to normal normal coloring and sensation have , remove clothing while showering		
	Name           Hydrogen suffide (Man constituent)           3.2         Mixtures           Not applicable           SECTION 4: First-aid measures           4.1         Description of first aid measures           First-aid measures after inhalation	ICAS Noi 7783-06-4	% (Vol.) 100 air and keep at rest in iration. If breathing is suse frostbite. For exp o exceed 105°F (41°C in warming for at leas fected area, in case of Seek medical evalua to eyes thoroughly with ebails to ensure that	Hydrogen sulfide (H2S) Sulfureted hydrogen / C a position comforta difficult, trained per bosure to liquid, imm ). Water temperatu it 15 minutes or until massive exposure tion and treatment a water for at least 11	// Hydrogen sulphide / Sulfur hydride / Jihydrogen sulphide / Hydrogensulfide ble for breathing. If not breathing, sonnel should give oxygen. Call a ediately warm frostbite area with re should be tolerable to normal normal coloring and sensation have , remove clothing while showering		
	Name           Hydrogen sulfide (Main constituent)           3.2         Mixtures           Not applicable           SECTION 4: First-aid measures           4.1         Description of first aid measures           First-aid measures after inhalation           First-aid measures after skin contact	ICAS Noi 7783-06-4	% (Vol.) 100 air and keep at rest in iration. If breathing is suse frostbite. For exp o exceed 105°F (41°C in warming for at leas fected area, in case of Seek medical evalua to eyes thoroughly with ebails to ensure that	Hydrogen sulfide (H2S) Sulfuneted hydrogen / C a position comforta difficult, trained per bosure to liquid, imm ). Water temperatu at 15 minutes or until of massive exposure tion and treatment a o water for at least 11 all surfaces are flust	<ul> <li>/ Hydrogen sulphide / Sulfur hydride / bhydrogen sulphide / Hydrogensulfide</li> <li>ble for breathing. If not breathing, sonnel should give oxygen. Call a</li> <li>ediately warm frostbite area with re should be tolerable to normal normal coloring and sensation have , remove clothing while showering s soon as possible.</li> <li>5 minutes. Hold the eyelids open and</li> </ul>		
	Name           Hydrogen sulfide (Man construent)           3.2         Mixtures           Not applicable         SECTION 4: First-aid measures           SECTION 4: First-aid measures         4.1           Description of first aid measures         First-aid measures after inhalation           First-aid measures after skin contact         First-aid measures after eye contact           First-aid measures after ingestion         4.2	ICAS Noi 7783-06-4	% (Vol.) 100 100 air and keep at rest in iration. If breathing is suse frostbite. For exp o exceed 105°F (41°C in warming for at lease fected area. In case of Seek medical evalua to eyes thoroughly with eballs to ensure that mmediately. onsidered a potential	Hydrogen sulfide (H2S) Sulfuneted hydrogen / C a position comforta difficult, trained per bosure to liquid, imm ). Water temperatu at 15 minutes or until of massive exposure tion and treatment a o water for at least 11 all surfaces are flust	<ul> <li>/ Hydrogen sulphide / Sulfur hydride / bhydrogen sulphide / Hydrogensulfide</li> <li>ble for breathing. If not breathing, sonnel should give oxygen. Call a</li> <li>ediately warm frostbite area with re should be tolerable to normal normal coloring and sensation have , remove clothing while showering s soon as possible.</li> <li>5 minutes. Hold the eyelids open and</li> </ul>		
	Name           Hydrogen sulfide (Man construent)           3.2         Moxtures           Not applicable         SECTION 4: First-aid measures           SECTION 4: First-aid measures         First-aid measures           First-aid measures after inhalation         First-aid measures after eye contact           First-aid measures after eye contact         First-aid measures after ingestion           A.2         Most important symptoms ar           No additional information available         First-aidable	ICAS Noi 7783-06-4	% (Vol.) 100 alr and keep at rest in biration. If breathing is suse frostbite. For exp o exceed 105°F (41°C in warming for at lease fected area. In case Seek medical evalua t eyes thoroughly with ebails to ensure that mmediately. onsidered a potential ed)	Hydrogen sulfide (H2S) Sulfuneted hydrogen / C a position comforta difficult, trained per bosure to liquid, imm ). Water temperatu at 15 minutes or until of massive exposure tion and treatment a o water for at least 11 all surfaces are flust	<ul> <li>/ Hydrogen sulphide / Sulfur hydride / bhydrogen sulphide / Hydrogensulfide</li> <li>ble for breathing. If not breathing, sonnel should give oxygen. Call a</li> <li>ediately warm frostbite area with re should be tolerable to normal normal coloring and sensation have , remove clothing while showering s soon as possible.</li> <li>5 minutes. Hold the eyelids open and</li> </ul>		
	Name           Hydrogen sulfide (Man construent)           3.2         Mixtures           Not applicable         SECTION 4: First-aid measures           SECTION 4: First-aid measures         4.1           Description of first aid measures         First-aid measures after inhalation           First-aid measures after skin contact         First-aid measures after eye contact           First-aid measures after ingestion         4.2	ICAS Noi 7783-06-4 S UITES E Remove to fresh give artificial resp physician. E The liquid may ca warm water not to skin. Maintain sk returned to the at with warm water. E Immediately flush away from the ey ophthalmologist i E Ingestion is not ci nd effects (acute and delaye and special treatment, if no	% (Vol.)         100           100         1           air and keep at rest in iration. If breathing is suse frostbite. For exp o exceed 105°F (41°C in warming for at least fected area. In case o Seek medical evalua teves thoroughly with eballs to ensure that mmediately. onsidered a potential ed)           ecessary	Hydrogen sulfide (H2S) Sulfureted hydrogen / C a position comforta difficult, trained per bosure to liquid, imm ). Water temperatu ti 15 minutes or until of massive exposure tion and treatment a water for at least 11 all surfaces are flush route of exposure.	<ul> <li>/ Hydrogen sulphide / Sulfur hydride / bhydrogen sulphide / Hydrogensulfide</li> <li>ble for breathing. If not breathing, sonnel should give oxygen. Call a</li> <li>ediately warm frostbite area with re should be tolerable to normal normal coloring and sensation have , remove clothing while showering s soon as possible.</li> <li>5 minutes. Hold the eyelids open and</li> </ul>		
	Name           Hydrogen sulfide (Man construent)           3.2         Mixtures           Not applicable         SECTION 4: First-aid measures           4.1         Description of first aid measures           First-aid measures after inhalation         First-aid measures after skin contact           First-aid measures after eye contact         First-aid measures after ingestion           4.2         Most important symptoms ar No additional information available           4.3         Immediate medical attention	ICAS Noi 7783-06-4 S UITES E Remove to fresh give artificial resp physician. E The liquid may ca warm water not to skin. Maintain sk returned to the at with warm water. E Immediately flush away from the ey ophthalmologist i E Ingestion is not ci nd effects (acute and delaye and special treatment, if no	% (Vol.)         100           100         1           air and keep at rest in iration. If breathing is suse frostbite. For exp o exceed 105°F (41°C in warming for at least fected area. In case o Seek medical evalua teves thoroughly with eballs to ensure that mmediately. onsidered a potential ed)           ecessary	Hydrogen sulfide (H2S) Sulfureted hydrogen / C a position comforta difficult, trained per bosure to liquid, imm ). Water temperatu ti 15 minutes or until of massive exposure tion and treatment a water for at least 11 all surfaces are flush route of exposure.	I Hydrogen sulphide / Sulfur hydride / Shydrogen sulphide / Hydrogensulfide Ible for breathing. If not breathing, sonnel should give oxygen. Call a ediately warm frostbile area with re should be tolerable to normal normal coloring and sensation have , remove clothing while showering s soon as possible. 5 minutes, Hold the eyelids open and red thoroughly. Contact an		
	Name           Hydrogen sulfide (Man construent)           3.2         Mixtures           Not applicable         SECTION 4: First-aid measures           SECTION 4: First-aid measures         First-aid measures           First-aid measures after inhalation         First-aid measures after eye contact           First-aid measures after eye contact         First-aid measures after ingestion           4.2         Most important symptoms ar           No additional information available         4.3           Getter medical advice or treatment         SECTION 5: Fire-fighting measures	ICAS Noi 7783-06-4 S Ures E Remove to fresh give artificial resp physician. E The liquid may ca warm water not to skin. Maintain sk returned to the af with warm water. E Immediately flush away from the ey ophthalmologist i E Ingestion is not co and effects (acute and delays and special treatment. If me E Obtain medical ai SURES:	% (Vol.)         100           100         1           air and keep at rest in iration. If breathing is suse frostbite. For exp o exceed 105°F (41°C in warming for at least fected area. In case o Seek medical evalua teves thoroughly with eballs to ensure that mmediately. onsidered a potential ed)           ecessary	Hydrogen sulfide (H2S) Sulfureted hydrogen / C a position comforta difficult, trained per bosure to liquid, imm ). Water temperatu ti 15 minutes or until of massive exposure tion and treatment a water for at least 11 all surfaces are flush route of exposure.	I Hydrogen sulphide / Sulfur hydride / Shydrogen sulphide / Hydrogensulfide Ible for breathing. If not breathing, sonnel should give oxygen. Call a ediately warm frostbile area with re should be tolerable to normal normal coloring and sensation have , remove clothing while showering s soon as possible. 5 minutes, Hold the eyelids open and red thoroughly. Contact an		
	Name           Hydrogen sulfide (Man construent)           3.2         Mixtures           Not applicable         SECTION 4: First-aid measures           SECTION 4: First-aid measures         First-aid measures           First-aid measures after inhalation         First-aid measures after eye contact           First-aid measures after eye contact         First-aid measures after ingestion           4.2         Most important symptoms ar           No additional information available         4.3           4.3         Immediate medical attention           Other medical advice or treatment         SECTION 5: Fire-fighting meas           5.1         Suitable extinguishing medical	ICAS Noi 7783-06-4 S UITES E Remove to fresh give artificial resp physician. E The liquid may ca warm water not to skin. Maintain sk returned to the at with warm water. E Immediately flush away from the ey ophthalmologist i E Ingestion is not ci nd effects (acute and delays and special freatment, if ne E Obtain medical at SUITES: a	% (Vol.)         100           100         100           air and keep at rest in initiation. If breathing is ause frostbite. For exploaceed 105°F (41°C in warming for at least fected area. In case of Seek medical evaluate eyes thoroughly with eballs to ensure that amendiately. onsidered a potential ed)           eccessary           salistance. Treat with initiation of the set of t	Hydrogen sulfide (H2S) Sulfureted hydrogen / C a position comforta difficult, trained per posure to liquid, imm ). Water temperatu ti 15 minutes or until of massive exposure tion and treatment a a water for at least 11 all surfaces are flush route of exposure.	I Hydrogen sulphide / Sulfur hydride / Shydrogen sulphide / Hydrogensulfide Ible for breathing. If not breathing, sonnel should give oxygen. Call a ediately warm frostbile area with re should be tolerable to normal normal coloring and sensation have, remove clothing while showering s scon as possible. 5 minutes, Hold the eyelids open and red thoroughly. Contact an as soon as possible after inhalation.		
	Name           Hydrogen sulfide (Man construent)           3.2         Mixtures           Not applicable         SECTION 4: First-aid measures           SECTION 4: First-aid measures         First-aid measures           First-aid measures after inhalation         First-aid measures after eye contact           First-aid measures after eye contact         First-aid measures after ingestion           4.2         Most important symptoms ar           No additional information available         4.3           Getter medical advice or treatment         SECTION 5: Fire-fighting measures	ICAS Noi 7783-06-4 S UITES E Remove to fresh give artificial resp physician. E The liquid may ca warm water not to skin. Maintain sk returned to the at with warm water. E Immediately flush away from the ey ophthalmologist i E Ingestion is not ci nd effects (acute and delays and special freatment, if ne E Obtain medical at SUITES: a	% (Vol.)         100           100         100           air and keep at rest in initiation. If breathing is ause frostbite. For exploaceed 105°F (41°C in warming for at least fected area. In case of Seek medical evaluate eyes thoroughly with eballs to ensure that amendiately. onsidered a potential ed)           eccessary           salistance. Treat with initiation of the set of t	Hydrogen sulfide (H2S) Sulfureted hydrogen / C a position comforta difficult, trained per posure to liquid, imm ). Water temperatu ti 15 minutes or until of massive exposure tion and treatment a a water for at least 11 all surfaces are flush route of exposure.	I Hydrogen sulphide / Sulfur hydride / Shydrogen sulphide / Hydrogensulfide Ible for breathing. If not breathing, sonnel should give oxygen. Call a ediately warm frostbile area with re should be tolerable to normal normal coloring and sensation have , remove clothing while showering s soon as possible. 5 minutes, Hold the eyelids open and red thoroughly. Contact an		
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Permian Resources Corporation	H <sub>2</sub> S Contingency Plan	Lea County, New Mexico
	El Campeon Fed 111H, 121H, 151H	

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Hydrogen sulfide

K	Safety Data Shee according to the Hazardous P		(February 11, 2	2015)	
	Date of issue: 10-15-1979	Revision date:	08-10-2016	Supersedes: 10-15-2013	

5.3. Specific hazards arising from the	hazardous product
Fire hazard	EXTREMELY FLAMMABLE GAS. If venting or leaking gas catches fire, do not extinguish flames. Flammable vapors may spread from leak, creating an explosive reignition hazard. Vapors can be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge, or other ignition sources at locations distant from product handling point. Explosive atmospheres may linger. Before entering an area, especially a confined area, check the atmosphere with an appropriate device.
Explosion hazard	: EXTREMELY FLAMMABLE GAS. Forms explosive mixtures with air and oxidizing agents.
Reactivity	: No reactivity hazard other than the effects described in sub-sections below.
Reactivity in case of fire	: No reactivity hazard other than the effects described in sub-sections below.
5.4. Special protective equipment and	precautions for fire-tighters
Firefighting instructions	: DANGER! Toxic, flammable liquefied gas
	Evacuate all personnel from the danger area. Use self-contained breathing apparatus (SCBA) and protective clothing. Immediately cool containers with water from maximum distance. Stop flow of gas if safe to do so, while continuing cooling water spray. Remove ignition sources if safe to do so. Remove containers from area of fire if safe to do so. On-site fire brigades must comply with their provincial and local fire code regulations.
Special protective equipment for fire fighters	Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire fighters.
Other information	: Containers are equipped with a pressure relief device. (Exceptions may exist where authorized by TC.).
SECTION 6: Accidental release me	asures
6.1. Personal precautions, protective (	equipment and emergency procedures
General measures	DANGER! Toxic, flammable liquefied gas. Forms explosive mixtures with air and oxidizing agents. Immediately evacuate all personnel from danger area. Use self-contained breathing apparatus where needed. Remove all sources of ignition if safe to do so. Reduce vapors with fog or fine water spray, taking care not to spread liquid with water. Shut off flow if safe to do so. Ventilate area or move container to a well-ventilated area. Flammable vapors may spread from leak and could explode if reignited by sparks or flames. Explosive atmospheres may linger. Before entering area, especially confined areas, check atmosphere with an appropriate device.
6.2. Methods and materials for contain	iment and cleaning up
Methods for cleaning up	Try to stop release. Reduce vapour with fog or fine water spray. Prevent waste from contaminating the surrounding environment. Prevent soil and water pollution. Dispose of contents/container in accordance with local/regional/national/international regulations. Contact supplier for any special requirements.
6.3. Reference to other sections	
For further information refer to section 8: E	xposure controls/personal protection
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Leak-check system with scapy water; never use a flame
	All piped systems and associated equipment must be grounded
	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only non-sparking tools, Use only explosion-proof equipment
	Wear leather safety gloves and safety shoes when handling cylinders. Protect cylinders from physical damage; do not drag, roll, slide or drop. While moving cylinder, always keep in place removable valve cover. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Never insert an object (e.g., wrench, screwdriver, pr bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove over-tight or rusted caps. Slowly open the valve. If the valve is hard to open, discontinue use and contact your supplier. Close the container valve after each use; keep closed even when empty. Never apply flame or localized heat directly to any part of the container. High temperatures may damage the container and could cause the pressure relief device to fail prematurely, venting the container contents. For other precautions in using this product, see section 16.

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SECTION 8: Exposure controls/personal protection

OEL TWA (mg/m<sup>3</sup>)

OEL TWA (ppm)

OEL STEL (ppm)

Hydrogen sulfide

Safety Data Sheet E-4611 eccording to the Hazardous Products Regulation (Pebruary 11, 2015) Date of issue: 10-15-1979 Revision date: 08-10-2016 Supersedes: 10-15-2013

7.2	Conditions for safe stor	age, including any incompatibilities
Storag	e conditions	Store only where temperature will not exceed 125°F (52°C). Post "No Smoking/No Open Flames" signs in storage and use areas. There must be no sources of ignition. Separate packages and protect against potential fire and/or explosion damage following appropriate codes and requirements (e.g., NFPA 30, NFPA 55, NFPA 70, and/or NFPA 221 in the U.S.) or according to requirements determined by the Authority Having Jurisdiction (AHJ). Always secure containers upright to keep them from failing or being knocked over. Install valve protection cap, if provided, firmly in place by hand when the container is not in use. Store full and empty containers separately. Use a first-in, first-out inventory system to prevent storing ful containers for long periods. For other precautions in using this product, see section 16
		OTHER DRECAUTIONS FOR HANDLING STORAGE AND USE When handling product

OTHER PRECAUTIONS FOR HANDLING, STORAGE, AND USE: When handling product under pressure, use piping and equipment adequately designed to withstand the pressures to be encountered. Never work on a pressurized system. Use a back flow preventive device in the piping. Gases can cause rapid sufficiation because of oxygen deficiency; store and use with adequate ventilation. If a leak occurs, close the container valve and blow down the system in a safe and environmentally correct manner in compliance with all international, federal/national, state/provincial, and local laws; then repair the leak. Never place a container where it may become part of an electrical circuit.

#### **Control parameters** 8.1. Hydrogen sulfide (7783-06-4) USA - ACGIH ACGIH TLV-TWA (ppm) 1 ppm USA - ACGIH ACGIH TLV-STEL (ppm) 5 ppm USA - OSHA 20 ppm OSHA PEL (Ceiling) (ppm) Canada (Quebec) VECD (mg/m<sup>2</sup>) 21 mg/m<sup>3</sup> Canada (Quebec) VECD (ppm) 15 ppm Canada (Quebec) VEMP (mg/m\*) 14 mg/m<sup>3</sup> Canada (Quebec) VEMP (ppm) 10 ppm Alberta OEL Ceiling (mg/m<sup>3</sup>) 21 mg/m<sup>3</sup> Alberta OEL Ceiling (ppm) 15 ppm Alberta OEL TWA (mg/m3) 14 mg/m3 Alberta OEL TWA (ppm) 10 ppm British Columbia OEL Ceiling (ppm) 10 ppm Manitoba OEL STEL (ppm) 5 ppm Manitoba OEL TWA (ppm) 1 ppm New Brunswick OEL STEL (mg/m²) 21 mg/m<sup>3</sup> New Brunswick OEL STEL (ppm) 15 ppm New Brunswick OEL TWA (mg/m<sup>3</sup>) 14 mg/m<sup>3</sup> New Brunswick OEL TWA (ppm) 10 ppm New Foundland & Labrador OEL STEL (ppm) 5 pom New Foundland & Labrador OEL TWA (ppm) 1 ppm Nova Scotia OEL STEL (ppm) 5 ppm OEL TWA (ppm) Nova Scotia 1 ppm Nunavut OEL Ceiling (mg/m³) 28 mg/m\* OEL Ceiling (ppm) Nunavut 20 ppm Nunavut OEL STEL (mg/m²) 21 mg/m<sup>3</sup> OEL STEL (ppm) Nunavut 15 ppm

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14 mg/m3

10 ppm

15 ppm

EN (English)

Nunavut

Nunavut

Northwest Territories

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according to the Hazardous Products Regulation (February 11, 2015) Date of issue: 10-15-1979 Revision date: 08-10-2016 Supersedes: 10-15-2013

Hydrogen sulfide (7783-0	6-4)		
Northwest Territories	OEL TWA (ppm)	10 ppm	
Ontario	OEL STEL (ppm)	15 ppm	
Ontario	OEL TWA (ppm)	10 ppm.	
Prince Edward Island	OEL STEL (ppm)	5 ppm	
Prince Edward Island	OEL TWA (ppm)	1 ppm	
Québec	VECD (mg/m <sup>2</sup> )	21 mg/m <sup>a</sup>	
Québec	VECD (ppm)	15 ppm	
Québec	VEMP (mg/m <sup>a</sup> )	14 mg/m <sup>2</sup>	
Québec	VEMP (ppm)	10 ppm	
Saskatchewan	OEL STEL (ppm)	15 ppm	
Saskatchewan	OEL TWA (ppm)	10 ppm	
Yukon	OEL STEL (mg/m <sup>2</sup> )	27 mg/m <sup>a</sup>	
Yukon	OEL STEL (ppm)	15 ppm	
Yukon	OEL TWA (mg/m²)	15 mg/m <sup>a</sup>	
Yukon	OEL TWA (ppm)	10 ppm	

Appropriate engineering controls 8.2

Appropriate engineering controls

: Use corrosion-resistant equipment. Use an explosion-proof local exhaust system. Local exhaust and general ventilation must be adequate to meet exposure standards. MECHANICAL (GENERAL): Inadequate - Use only in a closed system. Use explosion proof equipment and means the system of the system of the system of the system of the system. lighting.

B.3. Individual protection mean	sures/Personal protective equipment
Personal protective equipment	: Safety glasses. Face shield. Gloves.
Hand protection	Wear work gloves when handling containers. Wear heavy rubber gloves where contact with product may occur.
Eye protection	Wear goggles and a face shield when transfilling or breaking transfer connections. Select in accordance with the current CSA standard Z94.3, "Industrial Eye and Face Protection", and any provincial regulations, local bylaws or guidelines.
Respiratory protection	Respiratory protection: Use respirable fume respirator or air supplied respirator when working in confined space or where local exhaust or ventilation does not keep exposure below TLV. Select in accordance with provincial regulations, local bylaws or guidelines. Selection should be based on the current CSA standard Z94.4, "Selection, Care, and Use of Respirators." Respirators should also be approved by NIOSH and MSHA. For emergencies or instances with unknown exposure levels, use a self-contained breathing apparatus (SCBA).
Thermal hazard protection	Wear cold insulating gloves when transfilling or breaking transfer connections. Standard EN 511 - Cold insulating gloves.
Other information	: Other protection : Safety shoes for general handling at customer sites. Metatarsal shoes and cuffless trousers for cylinder handling at packaging and filling plants. Select in accordance with the current CSA standard Z195, "Protective Foot Wear", and any provincial regulations, local bylaws or guidelines. For working with flammable and oxidizing materials, consider the use of flame resistant anti-static safety clothing.
SECTION 9: Physical and ch	emical properties
9.1 Information on basic phys	ical and chemical properties
Physical state	: Gas
Appearance	: Colorless gas. Colorless liquid at low temperature or under high pressure.
A dealer of data and store	

Molecular mass	: 34 g/mol
Colour	: Colourless.
Odour	: Odour can persist. Poor warning properties at low concentrations. Rotten eggs.
Odour threshold	: Odour threshold is subjective and inadequate to warn of overexposure.

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Permian Resources Corporation	H <sub>2</sub> S Contingency Plan	Lea County, New Mexico
	El Campeon Fed 111H, 121H, 151H	



# Hydrogen sulfide

	criting to the Hazardous Products Regulation (February 11, 2015) le of issue: 10-15-1979 Revision date: 08-10-2016 Supersedes: 10-15-2013
673	
рН	: Not applicable.
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: Not applicable.
Meiting point	: -86 °C
Freezing point	: -82.9 °C
Boiling point	: -60,3 °C
Flash point	: Not applicable.
Critical temperature	: 100.4 °C
Auto-ignition temperature	: 260 °C
Decomposition temperature	: No data available
Vapour pressure	: 1880 kPa
Vapour pressure at 50 °C	: No data available
Critical pressure	: 8940 kPa
Relative vapour density at 20 °C	; >#
Relative density	: No data available
Relative density of saturated gas/air mixtur	e : No data available
Density	: No data available
Relative gas density	: 1.2
Solubility	: Water: 3980 mg/l
Log Pow	: Not applicable.
Log Kow	: Not applicable.
Viscosity, kinematic	: Not applicable.
Viscosity, dynamic	: Not applicable.
Viscosity, kinematic (calculated value) (40	C) : No data available
Explosive properties	: Not applicable.
Oxidizing properties	: None.
Flammability (solid, gas)	
	4.3 - 46 vol %
9.2. Other information	
Gas group	: Liquefied gas
Additional information	: Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level

10.1. Reactivity	
Reactivity	: No reactivity hazard other than the effects described in sub-sections below.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: May react violently with oxidants. Can form explosive mixture with air.
Conditions to avoid	<ul> <li>Avoid moisture in installation systems. Keep away from heat/sparks/open flames/hot surfaces – No smoking.</li> </ul>
Incompatible materials	: Ammonia. Bases. Bromine pentafluoride, Chlorine trifluoride, chromium trioxide. (and heat), Copper. (powdered). Fluorine. Lead. Lead oxide. Mercury. Nitric acid. Nitrogen trifluoride. nitrogen sulfide. Organic compounds. Oxidizing agents. Oxygen difluoride. Rubber. Sodium, (and moisture). Water.
Hazardous decomposition products	: Thermal decomposition may produce : Sulfur, Hydrogen.
SECTION 11: Toxicological info	mation
11.1. Information on toxicological et	fects
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified

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Hydrogen sulfide Safety Data Sheet E-4611 according to the Hazardous Products Regulation (Pebruary 11, 2015) Date of issue: 10-15-1979 Revision date: 08-10-2016 Supersedes: 10-15-2013

Acute toxicity (inhalation)	: Inhalation:gas: FATAL IF INHALED.
Hydrogen sulfide ( \f )7783-06-4	
LC50 inhalation rat (mg/l)	0.99 mg/l (Exposure time: 1 h)
LC50 inhalation rat (ppm)	356 ppm/4h
ATE CA (gases)	356.0000000 ppmw/4h
ATE CA (vapours)	0.9900000 mg/V4h
ATE CA (dust,mist)	0.99000000 mg/i/4h
Skin corrosion/irritation	: Not classified
	pH: Not applicable.
Serious eye damage/irritation	: Not classified
	pH: Not applicable.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: MAY CAUSE RESPIRATORY IRRITATION.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

12.1. Toxicity	
Ecology - general	: VERY TOXIC TO AQUATIC LIFE.
Hydrogen sulfide (7783-06-4)	
LC50 fish 1	0.0448 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
LC50 fish 2	0.016 mg/l (Exposure time: 96 h - Species: Pimephales prometas [flow-through])
12.2. Persistence and degrad	ability
Hydrogen sulfide (7783-06-4)	
Persistence and degradability	Not applicable for inorganic gases.
12.3. Bioaccumulative poten	al .
Hydrogen sulfide (7783-06-4)	16
BCF fish 1	(no bioaccumulation expected)
Log Pow	Not applicable.
Log Kow	Not applicable.
Bioaccumulative potential	No data available.
12.4. Mobility in soil	
Hydrogen sulfide (7783-06-4)	
Mobility in soil	No data available.
Log Pow	Not applicable.
Log Kow	Not applicable.
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution
12.5. Other adverse effects	
Other adverse effects	: May cause pH changes in aqueous ecological systems.
Effect on the ozone layer	: None
Effect on global warming	: No known effects from this product

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Date of iss	to the Hazardous Products Regulation (Pebruary 11, 2015) sue: 10-15-1979 Revision date: 08-10-2016 Supersedes: 10-15-2013		
SECTION 13: Disposal consideration	S		
13.1. Disposal methods			
Waste disposal recommendations	: Do not attempt to dispose of residual or unused quantities. Return container to supplier.		
SECTION 14: Transport information			
14.1. Basic shipping description			
In accordance with TDG			
TDG			
UN-No. (TDG)	: UN1053		
TDG Primary Hazard Classes	: 2.3 - Class 2.3 - Toxic Gas.		
TDG Subsidiary Classes	: 2.1		
Proper shipping name	: HYDROGEN SULPHIDE		
ERAP Index	: 500		
Explosive Limit and Limited Quantity Index	0		
Passenger Carrying Ship Index	: Forbidden		
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: Forbidden		
14.3. Air and sea transport			
MDG			
UN-No. (IMDG)	: 1053		
Proper Shipping Name (IMDG)	: HYDROGEN SULPHIDE		
Class (IMDG)	2 - Gases		
MFAG-No	1 117		
IATA UN-No. (IATA)	: 1053		
Proper Shipping Name (IATA)	: Hydrogen sulphide		
Class (IATA)	2		
SECTION 15: Regulatory information	Э. — — — — — — — — — — — — — — — — — — —		
15.1. National regulations			
Hydrogen sulfide (7783-06-4)			
Listed on the Canadian DSL (Domestic Substan	nces List)		
15.2. International regulations			
Hydrogen sulfide (7783-06-4)			
Listed on the AICS (Australian Inventory of Che Listed on IECSC (Inventory of Existing Chemica Listed on the EEC Inventory EINECS (European Listed on the Japanese ENCS (Existing & New Listed on the Korean ECL (Existing Chemicals Listed on NZIoC (New Zealand Inventory of Che Listed on PICCS (Philippines Inventory of Chen Listed on the United States TSCA (Toxic Subst Listed on INSQ (Mexican national Inventory of Chen	al Substances Produced or Imported in China) n Inventory of Existing Commercial Chemical Substances) Chemical Substances) inventory List) emicals) nicels and Chemical Substances) ances Control Act) inventory		
SECTION 16: Other information			
Date of issue	: 15/10/1979		
Revision date Supersedes	: 10/08/2016 : 15/10/2013		
onherence	+ 10110/2010		
Indication of changes:			
Training advice	: Users of breathing apparatus must be trained. Ensure operators understand the toxicity hazar Ensure operators understand the flammability hazard.		

Permian Resources CorporationH2S Contingency PlanLea County, New MexicoEl Campeon Fed 111H, 121H, 151H
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SDS Canada (GHS) - Praxair

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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	El Campeon Fed 111H, 121H, 151H	

 $SO_2SDS$ 



Safety Data Sheet

Material Name: SULFUR DIOXIDE
Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name SULFUR DIOXIDE Synonyms MTG MSDS 80; SULFUROUS ACID ANHYDRIDE; SULFUROUS OXIDE; SULPHUR DIOXIDE; SULFUROUS ANHYDRIDE; FERMENTICIDE LIQUID; SULFUR DIOXIDE(SO2); SULFUR OXIDE; SULFUR OXIDE(SO2) **Chemical Family** inorganic, gas **Product Description** Classification determined in accordance with Compressed Gas Association standards. **Product Use** Industrial and Specialty Gas Applications. **Restrictions on Use** None known. Details of the supplier of the safety data sheet MATHESON TRI-GAS, INC. 3 Mountainview Road Warren, NJ 07059 General Information: 1-800-416-2505 Emergency #: 1-800-424-9300 (CHEMTREC) Outside the US: 703-527-3887 (Call collect)

Section 2 - HAZARDS IDENTIFICATION Classification in accordance with paragraph (d) of 29 CFR 1910.1200. Gases Under Pressure - Liquefied gas Acute Toxicity - Inhalation - Gas - Category 3 Skin Corrosion/Irritation - Category 1B Serious Eye Damage/Eye Irritation - Category 1 Simple Asphyxiant **GHS Label Elements** Symbol(s) Signal Word Danger Hazard Statement(s) Contains gas under pressure; may explode if heated. Toxic if inhaled. Causes severe skin burns and eye damage. May displace oxygen and cause rapid suffocation. Precautionary Statement(s) Prevention Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

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# Safety Data Sheet

#### Material Name: SULFUR DIOXIDE

Wash thoroughly after handling. Do not breathe dusts or mists. Response IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. Specific treatment (see label). Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Disposal Dispose of contents/container in accordance with local/regional/national/international regulations. Other Hazards

Contact with liquified gas may cause frostbite.

CAS	Component Name	Percent
7446-09-5	Sulfur dioxide	100.0

#### Inhalation

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical attention.

#### Skin

IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If frostbite or freezing occur, immediately flush with plenty of lukewarm water (105-115°F; 41-46°C). If warm water is not available, gently wrap affected parts in blankets. DO NOT induce vomiting. Get immediate medical attention.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

Ingestion

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get immediate medical attention.

#### Most Important Symptoms/Effects

#### Acute

Toxic if inhaled, frostbite, suffocation, respiratory tract burns, skin burns, eye burns

#### Delayed

No information on significant adverse effects.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

#### Note to Physicians

For inhalation, consider oxygen.

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Permian Resources Corporation	H <sub>2</sub> S Contingency Plan El Campeon Fed 111H, 121H, 151H	Lea County, New Mexico



al Name: SUL			SDS ID: MA
anavera anavera	Section	5 - FIRE FIGHT	TING MEASURES
Unsuitable Exti None known.	uishing Media		foam or flood with fine water spray.
Negligible fire h Hazardous Cor sulfur oxides Fire Fighting N	azard. nbustion Products leasures		ool containers with water spray until well after the fir
Special Protect	ive Equipment and Pre tive fire fighting gear in	cautions for Firefigh	ople away, isolate hazard area and deny entry. tters breathing apparatus (SCBA) for protection against
	Section 6 - J	ACCIDENTAL R	ELEASE MEASURES
Ventilate closed Reduce vapors v Environmental	spaces before entering, with water spray. Do not	Evacuation radius: 15	entry. Stay upwind and keep out of low areas. 0 feet. Stop leak if possible without personal risk. material.
	Section	7 - HANDLING	AND STORAGE
Do not get in ey handling. Use or protection/face p drink or smoke v Conditions for Store in a well-v Store locked up. Protect from sur Store and handlk outside or in a d Incompatible N bases, combustil	aly outdoors or in a well protection. Contaminated when using this product. Safe Storage, Including centilated place. Keep or hight. in accordance with all ctached building. Keep s laterials	-ventilated area. Wear i work clothing should Keep only in original g any Incompatibiliti intainer tightly closed. current regulations an- separated from incomp	d standards. Protect from physical damage. Store
agents	a pupper	DE CONTRACTO	APPROXIM PROTECTION
Component Ex		RE CONTROLS	S / PERSONAL PROTECTION
and the same			
Sulfur dioxide	7446-09-5		
ACGIH:	0.25 ppm STEL		

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	El Campeon Fed 111H, 121H, 151H	



### Material Name: SULFUR DIOXIDE

NIOSH:	2 ppm TWA ; 5 mg/m3 TWA
	5 ppm STEL ; 13 mg/m3 STEL
	100 ppm IDLH
OSHA (US):	5 ppm TWA ; 13 mg/m3 TWA
Mexico:	0.25 ppm STEL [PPT-CT ]

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

Engineering Controls

Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

# Individual Protection Measures, such as Personal Protective Equipment

## Eye/face protection

Wear splash resistant safety goggles with a faceshield. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### **Skin Protection**

Wear appropriate chemical resistant clothing. Wear chemical resistant clothing to prevent skin contact.

# **Respiratory Protection**

Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other

# positive-pressure mode.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Secti	ion 9 - PHYSICAL A	AND CHEMICAL PROPERT	TIES
Appearance	colorless gas	Physical State	gas
Odor	irritating odor	Color	colorless
Odor Threshold	3 - 5 ppm	рН	(Acidic in solution )
Melting Point	-73 °C (-99 °F )	Boiling Point	-10 °C (14 °F )
Boiling Point Range	Not available	Freezing point	Not available
Evaporation Rate	>1 (Butyl acetate = 1 )	Flammability (solid, gas)	Not available
Autoignition Temperature	Not available	Flash Point	(Not flammable )
Lower Explosive Limit	Not available	Decomposition temperature	Not available
Upper Explosive Limit	Not available	Vapor Pressure	2432 mmHg @ 20 ℃
Vapor Density (air=1)	2.26	Specific Gravity (water=1)	1.462 at -10 °C

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### Material Name: SULFUR DIOXIDE

#### SDS ID: MAT22290

3% (@ 0 °C ) available		
available	Partition coefficient: n- octanol/water	Not available
available	Kinematic viscosity	Not available
available	Density	Not available
ified gas	Molecular Formula	S-02
06		
	n, Benzene, sulfuryl chloride, nitro	
ion 10 - STA	BILITY AND REACTIVIT	Y
	upture or explode if exposed to heat ide, metal oxides, metals, oxidizing	
11 - TOXIC	OLOGICAL INFORMAT	ION
f Exposure o respiratory sys	tem, burns, difficulty breathing	
ston 50 ave l	been review	been reviewed in various sources and the follow

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Material Name: SULFUR DIOXIDE

# Safety Data Sheet

SDS ID: MAT22290

**Delayed Effects** No information on significant adverse effects. Irritation/Corrosivity Data respiratory tract burns, skin burns, eye burns **Respiratory Sensitization** No data available. **Dermal Sensitization** No data available. **Component Carcinogenicity** Sulfur dioxide 7446-09-5 ACGIH: A4 - Not Classifiable as a Human Carcinogen LARC: Monograph 54 [1992] (Group 3 (not classifiable)) Germ Cell Mutagenicity

Toxic if inhaled, frostbite, suffocation, respiratory tract burns, skin burns, eye burns

No data available. **Tumorigenic Data** No data available **Reproductive Toxicity** No data available. **Specific Target Organ Toxicity - Single Exposure** No target organs identified. **Specific Target Organ Toxicity - Repeated Exposure** No target organs identified. **Aspiration hazard** Not applicable. **Medical Conditions Aggravated by Exposure** respiratory disorders

### Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity No LOLI ecotoxicity data are available for this product's components. Persistence and Degradability No data available. Bioaccumulative Potential No data available. Mobility No data available.

Section 13 - DISPOSAL CONSIDERATIONS

**Disposal Methods** 

Dispose of contents/container in accordance with local/regional/national/international regulations. Component Waste Numbers The U.S. EPA her not published waste numbers for this regulation for the second public of the s

The U.S. EPA has not published waste numbers for this product's components.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

Shipping Name: SULFUR DIOXIDE

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Permian Resources Corporation	H <sub>2</sub> S Contingency Plan	Lea County, New Mexico
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Material Name: SULFUR DIOXIDE

Hazard Class: 2.3 UN/NA #: UN1079 Required Label(s): 2.3

IMDG Information: Shipping Name: SULPHUR DIOXIDE Hazard Class: 2.3 UN#: UN1079 Required Label(s): 2.3

TDG Information: Shipping Name: SULFUR DIOXIDE Hazard Class: 2.3 UN#: UN1079 Required Label(s): 2.3

### International Bulk Chemical Code

This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Section 15 - REGULATORY INFORMATION

#### **U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Sulfur dioxide	7446-09-5
SARA 302:	500 lb TPQ
OSHA (safety):	1000 lb TQ (Liquid )
SARA 304:	500 lb EPCRA RQ

#### SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories

Gas Under Pressure; Acute toxicity; Skin Corrosion/Irritation; Serious Eye Damage/Eye Irritation; Simple Asphyxiant

**U.S. State Regulations** 

The following components appear on one or more of the following state hazardous substances lists:

Component	mponent CAS			MN	NJ	PA
Sulfur dioxide	7446-09-5	Yes	Yes	Yes	Yes	Yes

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)



This product can expose you to chemicals including Sulfur dioxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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Permian Resour	ces Corporat	tion			H	I <sub>2</sub> S C	onting	ency Pla	n		Lea Co	unty, New Mexico
				El C	amp	beon	Fed 11					
		1500										
	MATH	1650	N									
	askThe Ga	s Professio	nals'''									
				5	Safe	ety D	ata SI	neet				
Mate	rial Name: SUI	LFUR DIC	XIDE								SDS I	D: MAT22290
	Sulfur dioxide	7446-	09-5				_					
	Repro/Dev. To	58. J. 1997, W.S.	1999/1775	1253666715	y,7/2	29/201	1					
	Component A Sulfur dioxide			ry							125	
	US CA A	AU CN	EU	JP - EN	ICS	JP - I	SHL K	R KECI - A	nnex 1	KR KEO	CI - Annex 2	
	Yes DSL Y	fes Yes	EIN	Yes		Yes	Y	s		No		
						neoroal	1					
	KR - REACH	CCA M	X NZ	PH	TH-	TECI	TW, Cl	VN (D	raft)			
	No	Ye	s Yes	Yes	Yes		Yes	Yes				
				Sectio	on 16	5-01	THER I	NFORM	ATIC	DN		
	NFPA Rating Health: 3 Fire:	0 Instabili										
	Hazard Scale: Summary of C		al 1 = S	light 2 =	Mod	derate :	3 = Serio	$1 \le 4 \le Seve$	re			
	SDS update: 0. Key / Legend	2/10/2016										
											Road Transport; A	U -
	California/Mas	sachusetts	/Minne	sota/Nev	v Jers	ey/Per	insylvani	*; CAS - (	Chemic	al Abstract	s Service; CERCL	
											f Federal Regulations; I acts Regulations; I	
					1.1.1.1.1		S. 50	-		1.00	is Substance Direc Community; EIN	31 C - C - C - C - C - C - C - C - C - C
	European Inve	ntory of (E	xisting	Comme	rcial	Chemi	cal Subst	inces); EIN	ECS -	European I	Inventory of Exist	
											for Venezuela Bio	logical
	Exposure Indic Association; IC										onal Air Transport	
	Immediately D	angerous t	o Life a	nd Heal	th; IN	ADG -	Internatio	nal Mariti	me Dar	ngerous Go	ods; ISHL - Japan	
											Database; JP - Jap Inventory (KECI)	
	Existing Chem	icals List (	KECL)	; KR KE	CI A	nnex 2	- Korea	Existing C	hemica	ls Inventory	y (KECI) / Korea	
						- Control - Cont					ration; KR REACI Lower Explosive	
	LLV - Level L	imit Value	; LOLI	- List O	fLIst	STM - C	'hemAD'	/ISOR's R	egulate	ry Databas	e; MAK - Maxim	ım
											Ne- Non-specific Health; NJTSR -	
	Jersey Trade S	ecret Regi	stry; No	- Non-o	uanti	itative;	NSL-N	on-Domes	tic Sub	stance List	(Canada); NTP -	
											h Administration; ery Act; REACH-	PEL-
	Registration, E										m Exposure Limit	

•

**Operator Name: PERMIAN RESOURCES OPERATING LLC** 

Well Name: EL CAMPEON FEDERAL COM

Well Number: 122H

disposal site.

# Waste type: SEWAGE

Waste content description: Portable, self-contained toilets will be provided for human waste disposal. Upon completion of drilling and completion activities, or as required, the toilet holding tanks will be pumped and the contents thereof disposed of in an approved sewage disposal facility. All state and local laws and regulations pertaining to the disposal of human and solid waste will be complied with. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.

Amount of waste: 250 gallons

# Waste disposal frequency : Weekly

Safe containment description: Portable, self-contained toilets will be provided for human waste disposal. Upon completion of drilling and completion activities, or as required, the toilet holding tanks will be pumped and the contents thereof disposed of in an approved sewage disposal facility. All state and local laws and regulations pertaining to the disposal of human and solid waste will be complied with. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.

# Safe containmant attachment:

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

# **Disposal type description:**

Disposal location description: A LICENSED 3rd PARTY CONTRACTOR WILL BE USED TO HAUL AND DISPOSE OF HUMAN WASTE

# Waste type: GARBAGE

Waste content description: All garbage, junk and non-flammable waste materials will be contained in a self-contained, portable dumpster or trash cage, to prevent scattering and will be removed and deposited in an approved sanitary landfill. Immediately after drilling all debris and other waste materials on and around the well location not contained in the trash cage will be cleaned up and removed from the location. No potentially adverse materials or substances will be left on the location.

Amount of waste: 250 gallons

Waste disposal frequency : Weekly

Safe containment description: All garbage, junk and non-flammable waste materials will be contained in a self-contained, portable dumpster or trash cage, to prevent scattering and will be removed and deposited in an approved sanitary landfill. Immediately after drilling all debris and other waste materials on and around the well location not contained in the trash cage will be cleaned up and removed from the location. No potentially adverse materials or substances will be left on the location.

# Safe containmant attachment:

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

# **Disposal type description:**

Disposal location description: A LICENSED 3rd PARTY CONTRACTOR WILL BE UTILIZED TO HAUL AND DISPOSE OF GARBAGE

# **Reserve Pit**

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

Well Name: EL CAMPEON FEDERAL COM

Well Number: 122H

Reserve pit length (ft.)Reserve pit width (ft.)Reserve pit depth (ft.)Reserve pit volume (cu. yd.)Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

# **Cuttings Area**

Cuttings Area being used? NO Are you storing cuttings on location? N Description of cuttings location Cuttings area length (ft.) Cuttings area depth (ft.) Cuttings area depth (ft.) Is at least 50% of the cuttings area in cut? WCuttings area liner Cuttings area liner

**Section 8 - Ancillary** 

Are you requesting any Ancillary Facilities?: N Ancillary Facilities

# Comments:

Section 9 - Well Site

# Well Site Layout Diagram:

El\_Campeon\_122H\_RL\_20240818184322.pdf El\_Campeon\_SESW\_Pad\_2\_WSL\_20250130050959.pdf Comments: Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

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

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

CONDITIONS

Operator:	OGRID:	
Permian Resources Operating, LLC	372165	
300 N. Marienfeld St Ste 1000	Action Number:	
Midland, TX 79701	448239	
	Action Type:	
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)	

#### CONDITIONS

Created By	Condition	Condition Date
jdoolingpr	Cement is required to circulate on both surface and intermediate1 strings of casing.	4/2/2025
jdoolingpr	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	4/2/2025
matthew.gomez	Notify the OCD 24 hours prior to casing & cement.	4/24/2025
matthew.gomez	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.	4/24/2025
matthew.gomez	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	4/24/2025
matthew.gomez	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	4/24/2025
matthew.gomez	File As Drilled C-102 and a directional Survey with C-104 completion packet.	4/24/2025

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Action 448239