## District 1 1625 N. French Dr., Hobbs, NM 88240

Phone: (575) 393-6161 Fax: (575) 393-0720

Phone: (272) 323-0101 <u>District II</u> 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

#### State of New Mexico

Form C-101 Revised July 18, 2013

# Energy Minerals and Natural Resources Oil Conservation Division OBBS

**□**AMENDED REPORT

**Conditions of Approval** 

Printing (375) 748-(283 Pax: (575) 748-9720			Oil (	Oil Conservation Division Divi								
1000 Rio Brazos Ro Phone: (505) 334-6					1220	20 South St. Francis Dr. FEB 1 9 2020  Santa Fe, NM 87505  RECEIVED						
<u>District IV</u> 1220 S. St. Francis I Phone: (505) 476-34					Si	anta Fe,	, <b>NM</b> 8	7505	DECE	VED		
APPLIC	CATIO	N FOR	PERM	MIT TO DI	KILL, KE-	-ENTE	R, DE	EPEN,	PLUGBAC	K, OR A	ADD A ZONE	
		V-1	F PET	or Name and Add ROLEUM. 889, Midland, TX	. INC.					6 OGRID No 24010	)	
		B 47	U.Dux 16	oy, wildiaid, 17.							mber 025-46899	
3/6	ty Code				DMT	7 FEE					* Well No.	
IT Lat	Samian T	Thin	T Po		Surface Loc		1 ,,,				-7689	
UL - Lot F	Section 7	Township 15S		inge Lo 8E	x Idn F	Feet from 1350	1	'S Line ORTH	Feet From 2300	E/W Line WEST	County  LEA	
				£ }	Proposed Bo	ottom Ho						
UL - Lot	Section	Township	Rar			Feet from	T	'S Line	Feet From	E/W Line	e County	
					9. Pool In	formatio	n					
Denton, W	olfcamp				Pool Name						Pool Code 17290	
				A	dditional W		matio <u>n</u>					
Work N				ध Туре О	13. Cal	able/Rotary R			14. Lease Type P		15 Ground Level Elevation 3778'	
16. Mul N	iiple		<sup>17</sup> Propos 962	sed Depth 25'	1	Formation olfcamp			19. Contractor		<sup>20</sup> Spud Date 3/1/2020	
Depth to Groun	d water 45	Ft		<del></del>	n nearest fresh w	r	2418 Ft	-	Distance	to nearest surf	face water 3 Miles	
We will be	neing a cl	nood-boop	nuetem i	in lieu of lined	-240							
110 11000	nome -	Data-roop			pits osed Casing :	and Cem	ent Pr	ogram				
Туре	Hole	Size	Casing S	Size C	asing Weight/ft		Setting Depth Sacks o		Sacks of C	Cement	Estimated TOC	
Conductor	26	,"	20"	,	94#		41	0,	50		Surface	
Surface	17-1	/2"	13-3/	8"	54.5#		40	00'	400		Surface	
Intermediate	12-1	/4"	9-5/8	3"	40#		4700'		100	0	Surface	
Production	8-3/	/4"	5-1/2	2"	17*		96	25'	25' 600		4400'	
				Casing/Cen	nent Progran	m: Additi	ional C	omment	S			
Cmt will be	circulated	l as requir	red.									
				22. Propo	sed Blowout	t Prevent	tion Pr	ogram				
	Туре			Working	Pressure			Test Press	sure	Manufacturer		
XLT 13-5/8"			50	000		5000			Cameron			
23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.					OIL CONSERVATION DIVISION							
I further certify that I have complied with 19.15.14.9 (A) NMAC and/or 19.15.14.9 (B) NMAC , if applicable.				Appr	roved By	r:	<del>_</del>					
Signature:	Alch	1 1/ )	ipin						ant			
Printed name:	Mike Pippi	in				Title	à. r.					
Title: Petroleur	n Engineer	ř.				Appı	roved Da	ate: 02	/23/2000 E	xpiration Date	10:02/23/2022	
E-mail Address	: mike@p	ippinllc.cor	m		<del></del>							
Date: 2/10/202	Date: 2/10/2020 Phone: 505-327-4573				Conc	ditions of	f Approval A	Attached 36	e Atta	ched		

## **State of New Mexico Energy, Minerals and Natural Resources Department** Oil Conservation Division

## **Receipt of Fee Application Payment**

HOBBS OCD

FEB 1 9 2020

RECEIVED



**PO Number:** 

68QKM-200218-APD000

Payment Date:

2/18/2020 2:58:39 PM

Payment Amount:

\$500.00

Payment Type:

Credit Card

Application Type:

Application for a permit to drill, deepen, plug back or reenter a non-federal and non-indian well.

Fee Amount:

\$500.00

Application Status: Pending Document Delivery

OGRID:

24010

First Name:

Eric

Last Name:

Sprinkle

Email:

eric@vfpetroleum.com

IMPORTANT: If you are mailing or delivering your application, you must prin and include your receipt of payment as the first page on your application. All nailed and delivered applications must be sent to the following address: 1220 S. St. Francis Dr., Santa Fe, NM 87505. For inquiries, reference the PO Number listed above.

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 DISTRICT II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

## State of New Mexico

Energy, Minerals & Natural Resources Departments OCD Submit one copy to appropriate **OIL CONSERVATION DIVISION** 

> 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

FEB 1 9 2020

DAMENDED REPORT

Revised August 1, 2011

Form C-102

District Office

## RECEIVED

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number				Pool Code Pool Name						
30-025-				290	DE	ENTON	WOLFCI	9MP		
Property Code					Property Name			,	Well Number	
31620	6			,	DMT 7 FE	EE			3	
OGRID N	o.				Operator Name	2			Elevation	
2401	0			V-F	PETROL	EUM			3778'	
					Surface Locati	ОП				
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
F	7	15-S	38-E	38-E 1350 NORTH 2300 W			WEST	LEA		
				Bottom Hole L	ocation If Diffe	rent From Surface				
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
]		)	] ]						1	
Dedicated Acres	Joint or	Joint or Infill Consolidation Code Order No.								
40	40 N				N	56-768	99			
NO ALLOWABLE WI	LL BE ASSIGN	VED TO THIS C	OMPLETION UN	TTL ALL INTERES				T HAS BEEN APPRO	VED BY THE DIVISION	

2300	GEODETIC COORDINATES SURFACE LOCATION NAD 83 NME Y= 742499.5 N	GEODETIC COORDINATES SURFACE LOCATION NAD 27 NME Y= 742428.1 N y= persis e r	OPERATOR CERTIFICATION  I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
	NAD 83 NME	NAD 27 NAE	was plotted from field notes of actual surveys made by

## V-F Petroleum Inc.

500 W. Texas, Suite 350, Midland, Texas 79701 Mailing Address: P.O. Box 1889, Midland, TX 79702 432-683-3344 E-mail: bill@vfpetroleum.com FAX: 432-683-3352

#### WELL DRILLING & EVALUATION PROGRAM

January 20, 2020 V-F Petroleum Inc. **DMT 7 Fee #3** 1,350' FNL & 2,300' FWL Section 7, T-15-S, R-38-E Lea County, New Mexico

API Number: 30-025-43232

- 1. The elevation of the unprepared ground is 3778' above sea level.
- 2. The geological name of the surface information is Quanternery Alluvium.
- 3. A rotary rig will be utilized to drill the well to a vertical depth of 9,625' MD & 9,625' TVD and run casing to TVD. The drilling equipment will be rigged down and the well completed with a well service unit.
- 4. The well is located in the following Field: Denton; Wolfcamp.
- The following are estimated formation Tops:

	Est. Drill	Est.	Denton 7 #1
	<b>Depth</b>	Subsea	Log Depth
Rustler	2,170	1,623	2,168'
Yates	3,200'	593'	3,200'
7 Rivers	3,360'	433'	3,367'
Queen	3,925'	(-132')	3,979'
Grayburg	4,275'	(482')	4,278'
**San Andres	4,450'	(-657*)	4,461'
Glorieta	6,700'	(-2,907')	6,696'
**Blinebry	6,925'	(-3,132')	6,934'
Tubb	7,500'	(-3,707')	7,502
Drinkard	7,610'	(-3,817')	7,616'
*Abo	8,210'	(-4,417')	8,214'
<b>Abo Porosity</b>	9,340'	(-5,547')	9,348
*Wolfcamp	9,380'	(-5.587')	9,390'
TD	9,625'	(-5,832')	9,625'

<sup>\* =</sup> Primary objective

#### 6. The Proposed Casing and Cement Program is as follows:

20", 94#, J-55 ERW	40'	Conductor set at 40' and grouted with 50 sacks of Redi-Mix.
13 3/8", 54.5#, J-55, STC	400'	Surface Casing in 17 ½" hole cemented with 400 sacks Class C containing 2% CaCL <sub>2</sub> + ¼#/sack cellophane flakes mixed @ 14.8 ppg w/yield of 1.35ft <sup>3</sup> /sack. Circulate to surface.
9 5/8", 40#, N-80, LTC	4,700°	Intermediate Casing in 12 ¼" hole cemented with lead slurry of 800 sacks of Class "C" 65-35 Pozmix Lite containing ½#/sack cellophane flakes mixed @ 12.5 ppg w/yield of 1.7972ft³/sack followed by tail slurry of 200 sacks of Class C containing 1% CaCl <sub>2</sub> mixed @ 14.8 ppg w/yield of 1.32ft³/sack. Circulate to surface.

<sup>\*\* =</sup> Potential Oil or Gas bearing formations

#### V-F Petroleum Inc. DMT 7 Fee #2 Well Drilling & Evaluation Program

5 1/2", 17#, L-80, LTC

9,625

Production hole in 8 ¾" hole cemented with cemented with lead slurry of 400 sacks of Class "H" 50-50 Pozmix Lite containing ½#/sack cellophane flakes + .3% dispersant + .4% fluid loss additive + 10% bentonite mixed @ 11.5 ppg w/yield of 2.2374 ft³/sack followed by tail slurry of 200 sacks of Class H containing 15% anti-settling agent + .25% cement retarder + .5% fluid loss additive mixed @ 14.8 ppg w/yield of 1.32 ft³/sack. Tie back into 9 5/8" intermediate casing 200'+/-.

#### 7. Mud Program:

This well will be drilled with fresh water (8.33 ppg) from surface to a depth of 400'+/-. Surface hole Mud properties of pH 9.0 - 10.5, no control of WL, Viscosity of 28 - 34 cp, no control of filter cake. Pump rates of 300 - 500 GPM.

The <u>Intermediate hole</u> interval from 400'+/- to 4,700'+/- will be drilled with Salt Gel & Starch brine water (9.8 - 10.0 ppg). Intermediate hole Mud properties of pH 10.0 - 12.0, no control of WL, Viscosity of 28 - 29 cp, filter cake no control. Pump rates of 375 - 425 GPM. Other: utilize polymer sticks and MF-55 high viscosity sweeps as needed to clean hole.

The Production hole interval from 4,700'+/- to 9,625' will be drilled with Salt Gel & Starch cut-brine water (9.8-10.1) ppg). Production hole Mud properties pH 10.0-12.0, WL 20-30 cc's, Viscosity of 32-34 cp, filter cake less than 2. Pump rates of 400-425 GPM. Other: utilize MF-55 high viscosity sweeps as needed to clean hole and starch as needed to raise viscosity and control fluid loss.

#### 8. Mud Loggers:

On at 4,700' to TD 9,625', 2-man unit. The drilling fluid should be able to deliver excellent samples from 4,700' to TD. One set of ten (10) foot dry samples, including all circulating samples, shall be caught by the mud logger from surface to TD. Mud logger samples will be caught in all significant drilling breaks of 5 feet or more from 4,700' to TD.

#### 9. Testing, Logging & Coring Program

Run One: GR – Comp. Neutron 4,700' to surface

GR - Caliper - Comp. Neutron - PE- Density 9,625' to 4,700' GR - Caliper - Dual Laterlog w/MLL 9,625 to 4,700'

No testing or coring are anticipated.

#### 10. Potential Hazards:

No abnormal pressures or temperatures are anticipated. If H<sub>2</sub>S is encountered the operator will comply with all NMOCD rules and regulations regarding same. All personnel will be familiar with all aspects of safe operations and of all equipment being utilized to drill the well. Estimated BHP is 4,235 psi based on 0.44 x TVD. The estimated BHT is 165 degrees F. (See attached H<sub>2</sub>S site plan.)

#### 11. Pressure Control Equipment:

See attached description and diagram of Pressure Control Equipment.

#### 12. Duration of Operations:

Anticipated spud date will be March 1, 2020 to meet lease expiration and deadline. Move in operations and drilling are expected to require 25 days. Completion operations will require an additional 10 days. Production facilities already exist on the lease.

#### HYDROGEN SULFIDE (H2S) DRILLING PLAN SUMMARY

- A. All personnel shall receive proper H<sub>2</sub>S training in accordance with all NMOCD rules.
- B. Briefing Area: Two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment:

#### Well Control Equipment:

- a. Flare line 150' from wellhead to be ignited by flare gun.
- b. Choke manifold with a remotely operated choke.
- c. Mud/gas separator.

#### Protective Equipment for Essential Personnel:

#### **Breathing Apparatus**

- a. Rescue Packs (SCBA) 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- b. Work / Escape Packs 4 shall be stored on the rig floor and contain sufficiently long air hoses as not to restrict work activities.
- c. Emergency Escape Packs 4 packs shall be stored in the doghouse for emergency evacuation.

#### **Auxiliary Rescue Equipment:**

- a. Stretcher
- b. Two OSHA full body harness
- c. 100' of 5/8" OSHA approved rope
- d. 1-20# class ABC fire extinguisher

#### H2S Detection & Monitoring Equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places; Rig floor / bell nipple / end of flowline or where well bore is being discharged. (Gas sample tubes will be stored in safety trailer).

#### Visual Warning Systems:

- a. One color condition sign will be placed at the entrance to the site reflecting the possible conditions at the sight.
- b. A colored flag will be displayed reflecting the current condition at the site at the time.
- c. Two wind socks will be placed in strategic locations, visible from all angles.

#### Mud Program:

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to the surface. The operator will have the necessary mud products to minimize hazards while drilling in H<sub>2</sub>S bearing zones.

#### Metallurgy:

- a. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.
- b. All elastomers used for packing and seals shall be H<sub>2</sub>S trim.

EMERGENCY ASSISTANCE TELEPHONE LIST

#### Communication:

(432) 683-3344

Communication will be via two way radio in emergency and police vehicles. Cell phones will be utilized for company personnel and all other personnel.

#### PUBLIC SAFETY: 911 or see below Lea County Sheriff's Department----(575) 396-3611 Fire Department ~~~~ (575) 397-9308 Hospital (575) 492-5000 Ambulance ~~~~~~~~~~911 New Mexico State Police----(575) 392-5588 New Mexico Oil Conservation Division Hobbs Office ---(575) 393-6161 **Operator Contacts:** Petroleum. ~ (432) 683-3344 Rick Massey, Consultant~~~~ ~~~ (575) 942-4035 Bill Pierce, VP of Operations ----

Tom		Beall,
President		
<b>~~~~</b> (432) 683-3344		
Wayne	Luna,	Production
Superintendent		(432)
557-2688		

#### PRESSURE CONTROL EQUIPMENT

The blowout preventer equipment (BOP) will consist of a 5,000 psi rated, double "U" ram Cameron or Schaffer type that will be tested by and independent third party

to a maximum of 5,000 psi. The BOP's will be hydraulically operated and the ram type will be equipped with blind rams on bottom and pipe rams on top. An annular (Hydril) type preventer will be mounted on top of the double "U" ram type preventer and will be rated to 3000 psi. The annular preventer will be tested to a maximum of 2,500 psi. The 3M annular preventer will be installed on the 13 3/8" surface casing and utilized while drilling the intermediate hole. The double ram preventer and the annular preventer will be installed on the 9 5/8" intermediate casing and will remain in place until drilling operations have been completed. All casing strings will be tested to 50% of rated burst prior to drilling out. Should drilling operations extend beyond 30 days, the BOP will be tested by an independent third party.

Pipe rams will be operated and checked daily and each time the drill string is removed from the borehole. These function tests will be recorded on the IADC daily drilling sheet.

The BOP equipment will consist of the following:

- -Double ram with blind rams (bottom) and pipe rams (top),
- -Drilling spool or BOP with two side outlets (choke side and kill side shall be a minimum 2" diameter),
- -Kill line (2 inch minimum),
- -Minimum of two choke line valves with diameters of at least 2 inches.
- -2 inch diameter choke line,
- -two chokes one of which shall be capable of remote operations,
- -pressure gauge on choke manifold,
- -upper kelly cock valve with handle available,
- -Safety valve and subs to fit all drill string connections in use,
- -All BOPE connections subjected to well pressure will be flanged, welded or clamped,
- -A fill-up line above the uppermost preventer.

## V-F Petroleum Inc.

500 W. Texas, Suite 350, Midland, Texas 79701 Mailing Address: P.O. Box 1889, Midland, TX 79702 432/683-3344 E-mail: 432/683-3352FAN

E-mail: sandy a vipetroleum com

www.vfpetroleum.com

January 21, 2020

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

Lease Name or Unit Agreement
Name DMT 7 Fee
Well Number 3
OGRID Number 24010
Pool name or Wildcat
Denton: Wolfcamp

Unit Letter F: 1350 feet from the

North line and 2300 feet from the

West line, Sec 7 Township 15-S Rge

38-E NMPM Lea County

#### Gentlemen:

Please be advised that a Surface and Ranch Disturbance Agreement dated July 29, 2014 has been executed by V-F Petroleum Inc. (Operator) and Angell #2 Family Limited Partnership, P.O. Box 190, Lovington, NM 88260-0190.

Very truly yours,

Sandra K. Lawlis

Vice President & Controller

Sondy Lawlie

SKL/as

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

2/10/2020

## State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

#### **GAS CAPTURE PLAN**

Date. <u>Zi Ivizozo</u>							
☑ Original		Operat	or & OGRII	) No.: <u>V-F F</u>	ETROLEU	JM, INC.	
Amended - Reason for Amendment:							
		ons to be taken by			vell/product	ion facility flaring/venting for	
Note: Form C-129 mi	ist be submitted and	d approved prior to exc	reeding 60 day.	s allowed by F	Rule (Subsectio	on A of 19.15,18.12 NMAC).	
Well(s)/Production	1 Facility – Nam	e of facility					
The well(s) that wil	l be located at the	e production facility	are shown	in the table b	elow.		
Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments	
DMT 7 FEE #3	30-015-	F 7 15S 38E	1350'FNL 2300' FWL	35	Vented		
				I			

#### **Gathering System and Pipeline Notification**

Following this well's drilling & completion operations, we anticipate that all produced natural gas will be used on the lease.

#### Flowback Strategy

After the fracture treatment operations, well will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. We anticipate that all produced natural gas will be used on the lease.

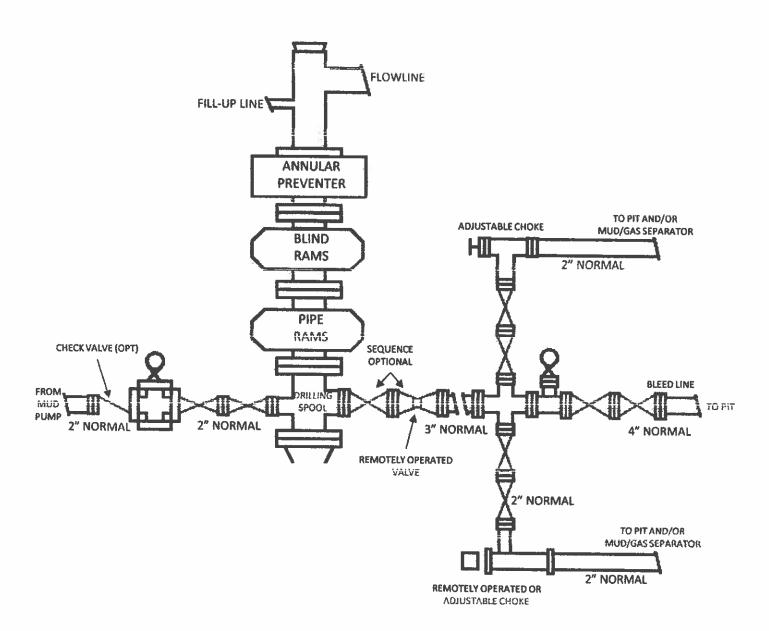
Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared.

#### Alternatives to Reduce Flaring

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

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

### **BOP DIAGRAM 5000# SYSTEM**



VF Petroleum Inc. DMT 7 Fee #3 BOP Schematic

#### **CONDITIONS OF APPROVAL**

API#	Operator	Well name & Number
30-025-46899	V-F PETROLEUM Inc.	DMT 7 FEE # 003

Applicable conditions of approval marked with XXXXXX

### Drilling

XXXXXXX	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

#### Casing

XXXXXXX	SURFACE & INTERNEMIATE(1) CASING - Cement must circulate to surface
XXXXXXX	PRODUCTION CASING - Cement must tie back into intermediate casing
XXXXXXX	If cement does not circulate to surface, must run temperature survey or other log to determine top of
	cement

#### **Lost Circulation**

XXXXXXX	Must notify OCD Hobbs Office if lost circulation is encountered at 575-370-3186

#### Stage Tool

XXXXXXX	Must notify OCD Hobbs Office prior to running Stage Tool at 575-370-3186
XXXXXXX	If using Stage Tool on Surface casing, Stage Tool must be greater than 350' and a minimum 200 feet above surface shoe.
XXXXXXX	When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.