ATS-07-393

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Form 3160-3 (February 200	UNITED STATES DEPARTMENT OF THE I BUREAU OF LAND MAN	INTERIOR	OME Expire 5. Lease Serial N	10558
	APPLICATION FOR PERMIT TO	DRILL OR REENTER		greement, Name and No.
la. Type o			8. Lease Name ar	nd Well No. (36426)
Ib.Type o2Name o	f Well: Oil Well Gas Well Other f Operator PAR Minerals Corporation	Single Zone Multi	ple Zone FOWLER 9. API Well No. 30-025-	58408
3a. Address	⁵ 509 Market St, Ste 300 Shreveport, LA 71101	3b. Phone No. (include area ode) (318) 221-6156	10. Field and Pool, FOWLER	or Exploratory Z2650 ELLENBURGER EAST
At surfa	n of Well (Report location clearly and in accordance with an	······································	11. Sec., T. R. M. or SEC 18 T2	r Blk. and Survey or Area 4S R38E
14. Distance	in miles and direction from nearest town or post office* s NE fro Jal, NM		12. County or Paris LEA	h 13. State NM
15. Distance location property	from proposed* 330 FT to nearest or lease line, ft. nearest drig. unit line, if any)	 No. of acres in lease 320 	17. Spacing Unit dedicated to th 40	is well
18. Distance to nearest	from proposed location* t well, drilling, completed, or, on this lease, ft. 1000 FT	19. Proposed Depth 12000	20. BLM/BIA Bond No. on file	Pe Pe
21. Elevatio GL 3	ons (Show whether DF, KDB, RT, GL, etc.) 195'	22. Approximate date work will sta Characteris Approx 24. Attachments		
2. A Drilling 3. A Surface SUPO mu	e Use Plan (if the location is on National Forest System ist be filed with the appropriate Forest Service Office).	Lands, the 5. Operator certifi		The second second
25. Signatur Title	Ellin w Any	Eddie W Seay	Agent	3/24/07
Approved by		Name (Printed/Typed)		Date
Title	FIELD MANAGER	Office CARL	SBAD FIELD OF	MAY 1 5 200
donduct opera	pproval does not warrant or certify that the applicant hold ations thereon. f approval, if any, are attached.	s legal or equitable title to those right		dentitle the applicant to
Title 18 U.S.C. States any fals	Section 1001 and Title 43 U.S.C. Section 1212, make it a cr e, fictitious or fraudulent statements or representations as t	ime for any person knowingly and to any matter within its jurisdiction.	willfully to make to any departmer	t or agency of the United
PPROVAL S	ONS ON PAGE 2) UBJECT TO CAPITAN CONTR QUIREMENTS L STIPULATIONS	OLLED WATER BASIN	I	
SEE ATTA CONDITIO	CHED FOR NS OF APPROVAL			

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District_I 1825_N_Example De	. Wabba W	04 0004A			State of	New Mexico)		Form C-102
1625 N. French Dr., Wistrict II	., HODDS I	NM 0024U		-	y, Minerals & Na		-		Revised June 10, 2003
1301 W. Grand Aver	nue, Artes	ia, NM 88	210	(OIL CONSERV	ATION DIVI	SION	Submit to A	ppropriate District Office
District III 1000 Rio Brazos Rd	d. Aztec.	NM 87410			1220 South	St. Francis	Dr.		State Lease - 4 Copies
District IV					Santa F	e, NM 87505			Fee Lease – 3 Copies
1220 S. St. Francis	a Dr., San	ta Fe, NM						C] AMENDED REPORT
			WELL		TION AND A	ACREAGE D	EDICATION	PLAT ³ Pool Name	
30-0	15-1	5840	R	265	ool Code	Fouta	Ellesbur	ger East	4
⁴ Property (1				erty Name		der cas	*Well Number
3642	-	<u>F</u>	Fowler Fede	eral		1		· · · · · · · · · · · · · · · · · · ·	1 *Elevation
21525	-		AR MInera	ls Corp	•	ator Name			3195'
					¹⁰ Surface	Location			
UL or lot no.	Section	Townshi	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	18	24 S			330	North	1650	East	Lea
	10	<u></u>		L					
				T	ole Location I				r
UL or lot no.	Section	Township	P Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
				<u> </u>					
¹² Dedicated Acres	¹³ Joint or	- Infill	¹⁴ Consolidation	Code ¹⁴	Order No.				
40 -									
NO ALLOWA	ABLE	WILL I	BE ASSIGN	ED TO	THIS COMPLI	TION UNITL	ALL INTERE	STS HAVE BE	CEN CONSOLIDATED
		OR	A NON-S'	ΓANDAI	RD UNIT HAS	BEEN APPRO	OVED BY TH	E DIVISION	
16								¹⁷ OPERATOR	CERTIFICATION
				ł	9 330'	1650' ·			information contained herein is
				F	ówler Federal No. 1	1000			iest of my knowledge and
				¶∕EI	ev. 3195'	X	<i>bel</i>	ief.	~
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					= 882657		Sig	nature	
								Darrell G	arrett
							Pris		
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								March 5,	2007
							Dat	•	
							18	SUDVEVOD	CERTIFICATION
									ell location shown on this plat
									s of actual surveys made by
				1			JJ J		m, and that the same is true
							and	correct to the best of a	my belief.
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							Det	• of Survey	CHNEL L. STANA
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File No. <u>A-3263.DWG</u>

B. Proposed Cement Program:

11-3/4″	Surface Casing:	Cement to surface with 600 sx of Class C + 2% CaCl2 + $\frac{1}{4}$ #/sx flocele.
8-5/8"	Intermediate:	Cement to surface with 900 sx of Premium Plus lite + 15#/sx salt + ¼#/sx flocele and 400 sx Class C + 2% CaCl2
5-1/2	Prod Casing:	Cement with 850 sx 50/50 Class H/Poz + 2% gel + .4% CF-14, .1% Diacel LWL. This cement slurry is Designed to bring TOC to 5000'.

All slurries will be tested prior to loading to confirm thickening times and a lab report furnished to Par Minerals. Fluid loss will be tested and reported on slurries with fluid loss additives. Lab test report will be furnished prior to pumping cement.

V. Proposed Mud Program:

> The well will be drilled to TD with a combination of brine, cut brine, and polmer/KCL mud system. The applicable depths and properties of this system are as follws:

		WEIGHT	VISCOSITY	WATERLOSS	
DEPTH	TYPE	(ppg)	(sec)	(cc)	
0-1000'	Fresh Water (spud)	8.5	40-45	N.C.	_
1000'-6500'	Brine water	10.5	30	N.C.	
6500'- TD	Fresh water/ Bentonite/Lo Solids	8.8-9.2	28	N.C.	

Sufficient mud material to maintain mud properties and meet lost circulation and weight increase requirements will be kept at wellsite at all times.

VI. Minimum Specifications for Pressure Control:

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The blowout preventer equipment (BOP) shown in Exhibit # 1 will consist of a double ram-type (5000 psi WP) preventer and an annular preventer (5000 psi WP). Units will be hydraulically operated and the ram-type will be equipped with blind rams on top and drill pipe rams on bottom. All will be installed on the 11-3/4" surface casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 600 psy before drilling out of surface casing. Before drilling out or intermediate casing, the ram-type BOP and accessory equipment will be tested to 5000 psi and the annular to 10%) of rated working pressure (3800 psi)

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted onl the daily tour sheets. A 2" kill line and 4" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a

2500

kelly cock and floor safety valve (inside BCP) and choke lines and choke manifold with 5000 psi WP rating.

- VII. Auxiliary Well Control and Monitoring Equipment program:
 - A. A kelly cock will be kept in the drill string at all times.
 - B. A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
 - C. Amud logging unit complete with H2S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 2000' to TD.
- VIII. Logging, Testing and Coring Program:
 - A. The electric logging program will consist of GR-Compensated Density-Neutron from TD to surface and GR-Dual Laterolog-MSFL from TD to intermediated casing.
 - B. Possible side wall cores based on shows.
- IX. Abnormal Conditions, Pressures, Temperatures & Potential Hazards:

No abnormal pressures of temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 175 degrees F with an estimated maximum bottom hole pressure (BHP) at TD of 4900 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

X. Anticipated Staring Date and Duration of Operations:

The drilling operation should be finished in approximately one week. If the well is productive, an additional 30 to 45 days will be required for completion and testing before a decision is made to install permanent facilities.



EXHIBIT #1

7

District I	St	ate of New Mexico	-
1625 N. French Dr., Hobbs, NM 88240 District II		inerals and Natural Resources	Form C-144 June 1, 2004
1301 W. Grand Avenue, Artesia, NM 88210			,
District III 1000 Rio Brazos Road, Aztec, NM 87410		Conservation Division	For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe
District IV) South St. Francis Dr.	For downstream facilities, submit to Santa Fe office
1220 S. St. Francis Dr., Santa Fe, NM 87505	<u> </u>	anta Fe, NM 87505	
		nde Tank Registration or k covered by a "general plan"? Ye	
Type of action: Res	gistration of a pit of	or below-grade tank 🔀 Closure of a pit or	below-grade tank
Operator: PAR Minerals Corp. Address: 509 Market ST. ST.	Telephon	e: <u>(318)221-6156</u> e-mail add Leevenart, LA 71191	tress: Seay 04@/eace • net Qtr_ <u>B</u> Sec <u>18</u> T <u>245</u> R <u>38E</u> e NAD: 1927 □ 1983 □
Facility or well name: Fourter Federal	#/	0-025- 38408 U/L or Qtr/	Qtr <u>B</u> Sec <u>18</u> T <u>245</u> R <u>38E</u>
County: <u>Lea</u>	Latitude _	Longitud	e NAD: 1927 [] 1983 []
Surface Owner: Federal 🔲 State 🗋 Private 🕱 Indian 🗌			
Pit	•••••• <u>••••••</u> •••••••	Below-grade tank	
Type: Drilling X Production Disposal		Volume:bbl Type of fluid:	
Workover 🗌 Emergency 🔲		Construction material:	
Lined 🛛 Unlined 🗌		Double-walled, with leak detection? Ye	
Liner type: Synthetic 🗋 Thickness 20 mil Clay	1		
Pit Volume 7900 bbl			
		Less than 50 feet	(20 points)
Depth to ground water (vertical distance from bottom of	pit to seasonal	50 feet or more, but less than 100 feet	(10 points) 10
high water elevation of ground water.) 55			
		100 feet or more	(0 points)
Wellhead protection area: (Less than 200 feet from a pri	vate domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water s		NO	(0 points) Ø
		Less then 200 first	(20 points)
Distance to surface water: (horizontal distance to all wet	lands, playas,	Less than 200 feet	
Distance to surface water: (horizontal distance to all wet irrigation canals, ditches, and perennial and ephemeral w		200 feet or more, but less than 1000 feet	(10 points)
		200 feet or more, but less than 1000 feet	(10 points)
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Operator's Name:	PAR Minerals Corp.
Well Name & No.	Fowler Federal # 1
Location:	330'FNL, 1650'FEL, SEC18, T24S, R38E, Lea County, NM
Lease:	NM-90558

I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance, at Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

- 1. Spudding
- 2. Cementing casing: 11.75 inch 8.625 inch 5.5 inch
- 3. BOP tests

B. A Hydrogen Sulfide (H2S) Drilling Plan is N/A.

C. 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.

D. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

E. If floor controls are required, (3M or Greater) 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.

II. CASING:

A. The <u>11.75</u> inch surface casing shall be set <u>above the salt, at least 25 feet into the Rustler Anhydrite</u> <u>@ approximately 1000 feet</u> and cement circulated to the surface.

- 1. 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 a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
- 2. Wait on Cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, which ever is greater. (This is to include the lead cement)
- 3. WOC time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds of compression strength, which ever is greater.
- 4. If cement falls back, Remedial cementing shall be completed prior to drilling out that string.

B. The minimum required fill of cement behind the <u>8.625</u> inch intermediate casing is <u>circulate cement to</u> <u>the surface</u>. If cement does not circulate see A.1 thru 4.

C. The minimum required fill of cement behind the ____ inch production casing is <u>cement shall extend</u> <u>upward a minimum of 1500 feet above the base of the intermediate casing string.</u>

D. If hard band 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.

III. PRESSURE CONTROL:

A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2.

B. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the intermediate casing well bore shall be 2000 psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the **8.625** inch casing shall be **5000** psi.

C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

1. The tests shall be done by an independent service company.

2. The results of the test shall be reported to the appropriate BLM office.

3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of the independent service company test will be submitted to the appropriate BLM office.

4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. The test will be held for a minimum of 10 minutes if the test is done with a test plug and 30 minutes without a test plug.

5. BOP/BOPE must be tested by an independent service within 500 feet of the top of the **Wolfcamp** Formation. This test does not exclude the test prior to drilling out the casing shoe as per onshore order No. 2.

6. A variance to test the ______ to the reduced pressure of ____psi with the rig pumps is approved the BOP/BOPE must be tested by an independent service company.

IV. 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. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses.

- 2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- 3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.

V. Hazards:

- 1. Our geologist has indicated that there is potential for lost circulation in the Yates formation.
- 2. Our geologist has indicated that there is potential for abnormal pressure in the Wolfcamp formation and the Pennsylvanian system.

Engineering may be contacted at 505-706-2779 for variances if necessary.

FWright 4/11/07