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

State of New Mexico

Form C-101 Revised August 1, 2011

Energy Minerals and Natural Resources

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

RECEIVED

Permit

JUN 2 1 2013

NMOCD ARTESIA

Phone; (505) 476-	-3460 Fax: (505) 476-3462					INION	OW THE	
. AP :	PLICA	ΓΙΟΝ Ι	FOR PERMI	T TO DRILL, RE	E-ENTER,	DEEPE	N, PLUGB	ACK, O	R ADD A ZONE
		4	Operator Name a	and Address			.	² OGRÍÐ Ni 11930	ımber
		٠,	Ray Westall O ₁ P.O. B	-	API Number				
			Loco Hills, N		30-015-23350				
* Prope	erty Code		T	Property N	Vaine		<u> </u>		⁶ Well No.
3	9972			State B 14	SWD			,	1
	-	*1		⁷ Surfac	e Location	n		<u></u>	
UL - Lot	Section	Township	Range	Lot Idin Feet fi	rom N/	'S Line	Feet From	E/W Line	County
Р	14	18.5	28 E	60	50' 5	outh	990'	East	E ddy
		11		⁸ Pool I	nformatio	n			
				SWD; Bone Spring - \	Nolfcamp / S	SWD; Cisc	0	-	96096 / 96099
		,		Additional V	Vell Inform		·····		
	k Type		10 Well Type	11 Cable/F		12	Lease Type	13	Ground Level Elevation
	E .	- !	S 15 p	R 16 Forms		17	S		3538.5'
	ultiple N	.,	Proposed Depth 9850' PBT				Contractor TBD		7/15/2013
Depth to Groun	nd water	~150'	Dista	nce from nearest fresh water		ile		to nearest sur	
			19	Proposed Casing	and Cem	ent Prog	ram		
Туре	Hole	e Size	Casing Size	Casing Weight/ft		g Depth	Sacks of	Cement	Estimated TOC
Surface	17	7.5"	13.375"	54.5#	4:	59'	425	'C '	Circ. to Surf.
Intermedia	ite 11	.0"	8.625"	32# 3084		84'	101	5 'C'	Circ. to Surf.
Productio	n 7.	875"	5.5"	17 & 20#	100	10078' 875 'H' + 500		C irc. to S urf.	
									<u> </u>
<u> </u>					<u> </u>		L		
				ng/Cement Progra				,	
				ot seal and casing patch asing will be shot and so	_				s seal.
		i		Proposed Blowou			=		
	Туре			Working Pressure		Test Pressi			
Hydraulic o	r Man./DI	bl. Blind	Ram	3000 psi		5000 p	00 psi S haffer/Hydril or equivale		
F									
of my knowl	edge and be	lief.		and complete to the best		OIL CO	ONSERVA	TION DI	VISION
I further certify that the drilling pit will be constructed according to NMOCD guidelines ⊠, a general permit □, or an (attached) alternative OCD-approved plan □.					Approved By: / Chastast				
Printed name	e: Ben S	tone			Title:	Start	2151		_
Title:	Agent	for Ray \	Westall Operatin	g, Inc.	Approved Da	te: 6/21	2013	Expiration Da	10:6/21/2015
E-mail Addr	ess: bene	@ s os c on	sulting.us						ejajas
Date:	6/19/2013			903-488-9850	Conditions of	Annroval Att	ached	<u></u>	
, (U/4U/4U13		1	700 7000	1 20	ppiorui / tit			

<u>District I</u>

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102 Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

		:	WELL LO	CATIO	N AND ACRI	EAGE DEDICA	ATION PLAT			
1/	API Number	r 4		² Pool Code	,	•	3 Pool Name			
30-0	50	į	96096		SWD; Bone Spring-Wolfcamp					
4 Property C 3997	.;		⁵ Property Name State B 14 SWD					⁶ Well Number		
7 OGRID I	No.				8 Operator Na	ame	-	9	Elevation	
11930	5			Ra	y Westall Oper	ating, Inc.		35	38.5 feet	
		1			¹⁰ Surface L	ocation		I		
UL or lot no.	Section	n Township Range Lot Idn Feet from the North/South line Feet from the E					East/West line	County		
Р	14	18-9	S 28-E		660	South	990	East	Eddy	
		· · ·	11 Bo	ttom Ho	le Location If	Different From	Surface			
UL or lot no.	Section	Townshi	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
		·								
12 Dedicated Acres	13 Joint o	r Infill	14 Consolidation C	Code 15 Or	rder No.					
n/a n/a		n/a		SWD-	(Pending)		ing)			
		4								
	will be ass	signed to	o this completi	on until a	ll interests have b	een consolidated o	r a non-standard	unit has been ap	proved by the	
division.		1								

16	:	•		17 OPERATOR CERTIFICATION
	:			I hereby certify that the information contained 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
			Ę	the proposed bottom hole location or has a right to drill this well at this
	1		•	location pursuant to a contract with an owner of such a mineral or working
			1	interest, or to a voluntary pooling agreement or a compulsory pooling
			•	order heretofore entered by the division.
	·.			6/19/2013
				Signature Date
				Benjamin E. Stone
				Printed Name
ł				SOS Consulting, LLC agent for:
				Ray Westall Operating, Inc.
		<u> </u>		
			:	¹⁸ SURVEYOR CERTIFICATION
	,			I hereby certify that the well location shown on this
				plat was plotted from field notes of actual surveys
	•			made by me or under my supervision, and that the
			'	same is true and correct to the best of my belief.
1				Same to true time earries to the desit sty mily dentify.
			i	March 10, 1980
				Date of Survey
	1			Signature and Seal of Professional Surveyor:
				John West
	:		990 feet	
			•	
{	'	000	 	Cort No 676
		660	feet /	Cert. No.676 Certificate Number

District I

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State of New Mexico

Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WE.	LL LOCATION A	$\overline{\mathbf{n}}$	ACREAGE DEDICATION PLAT
	² Pool Code		³ Pool Name

\ ·	30-015-23350						SWD; Ci			
⁴ Property C 39972	*!	<u> </u>	State B 14 SWD					6 Well Number		
⁷ OGRID №. 119305				* Operator Name Ray Westall Operating, Inc.					Elevation 38.5 feet	
					10 Surface I	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
P	14	. 18-S	28-E		660	South	990	East	Eddy	
			11 Во	ttom Hol	le Location If	Different From	Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
12 Dedicated Acres	¹³ Joint o	r Infill 14	Consolidation C	Code 15 Ord	der No.					
n/a n/a n/a SWD- (Pending)					ding)					

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the

16		į	17 OPERATOR CERTIFICATION
:			I hereby certify that the information contained 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 a mineral or working
		·	interest, or to a voluntary pooling agreement or a compulsory pooling
;		r	order heretofore entered by the division.
			25
;		:	Signature 6/19/2013 Date
			Signature - Date
			Benjamin E. Stone
		•	Printed Name
			SOS Consulting, LLC agent for:
			Ray Westall Operating, Inc.
			Tray Westan Operating, inc.
			¹⁸ SURVEYOR CERTIFICATION
			I hereby certify that the well location shown on this
			plat was plotted from field notes of actual surveys
		:	
			made by me or under my supervision, and that the
			same is true and correct to the best of my belief.
		,	March 10, 1000
			March 10, 1980 Date of Survey
\		:	Signature and Scal of Professional Surveyor:
. :		1	
		'	John West
		990 feet	
1		⋄ — →	
	222	\c,	Cost No 676
	660	feet	Cert. No.676 Certificate Number
		♦	Connect (willow

Ray Westall Operating, Inc. State B-14 Well No.1 SWD Section 14, Twp 18-S, Rng 28-E Eddy County, New Mexico

Well Re-entry Program

Objective: Re-enter the existing wellbore by drilling out all plugs, clean out to TD, log and perforate intervals and run new tubulars to configure for salt water disposal.

1. **Geologic Information** - (Roy E. Johnson, Consulting Geologist) - The Bone Spring Formation is the slope to basin equivalent of the Abo-Yeso shelf sediments of the Northern Delaware Basin. These were deposited as allochthonous debris sediments along the shelf and basin slope by slumping, debris flows, surge channel deposits, and turbidity currents. Geologists have divided this formation into three separate carbonate units, 1st, 2nd, and 3rd Bone Spring carbonates. The units are separated by clastic and detrital carbonate material and in certain areas where these detrital zones have been dolomitized excellent secondary porosity can be expected.

The Wolfcamp is a light gray-brown fine to medium crystalline fossiliferous limestone with inter-crystalline vugular porosity interbedded with gray shale. Additional porosity can be found when the well bore encounters detrital carbonates which were shed off shelf and foreslope areas and transported down the Wolfcamp paleoslope. This may explain the best porosity in the proposed injection interval located from 8290' to 8295'.

The Cisco Formation (Upper Penn) similar to the Wolfcamp is a gray micritic (fine grained) fossiliferous limestone with vugular porosity. The reservoirs in this area are usually limited in size with up dip porosity loss due to shelf margin carbonate build up.

In conclusion, the proposed injection intervals for this disposal well may have limited capacity in the Wolfcamp and Cisco Formations due to the nature of the reservoir. This is substantiated by the cumulative production history of these formations with the Wolfcamp making 29 barrels of oil and 714 Mcf, and the Cisco making 8471 barrels of oil with 496 MMcfg. The Bone Spring Formation has a relatively low porosity but there is several thousand feet of formation that can be exploited for this purpose.

Formation Tops:

Salado	662
Yates	790
Seven River	1110
Queen	1780
San Andres	2570
Bone Spring	5340
Wolfcamp	7696
Cisco (Bough C)	8655
Strawn	9448
Atoka	10088
Mississippian	10762

2. Completion Procedure

a. MIRU pulling unit, reverse unit and associated equipment. Install BOP. RIH with bit and collars to drillout plugs.

- b. As the 5-1/2" casing was shot and pulled during plugging, Ray Westall Operating, Inc will run new 5-1/2" casing and attach to the stub @ 3122' with an overshot seal and casing patch.
 - c. This new casing will be cement circulated to surface. 560 sx + excess to circulate.
- d. Westall will likely perforate and test the Seven Rivers for injectivity on the way into and as part of this workover. Upon completion of the test, any perforations will be cement squeezed and drillout operations will resume subsequent to WOC. (This operation will be reported on intent and subsequent sundries if it is confirmed to be performed.)
- e. Continue to drill cement plugs and CIBP currently set at ~9000'. Circulate hole clean. Set CIBP @ 9200' (or @ 9850' if is determined to utilize lower Penn and Strawn porosity) and cap with 35' cement.
- f. The existing TOC on the 5-1/2" is at 6610' by temperature survey. The free pipe interval will be shot and squeezed to effectively tie a continuous cement sheath from that depth to the newly cemented 5-1/2" @ 3122'.
- g. Selectively perforate the Bone Spring, Wolfcamp, Cisco and/or Strawn formations between 7696' and 9448' exact depths to be determined. (Exact depths will be specified on NOI sundry prior to completion operation.)
- 3. **Tubular program** The well casing is set except as described above. (See attached Proposed Well Schematic) 2-3/8" or 2-7/8" internally coated tubing will be run and set in a packer located at approximately 6660' (within 100' of the uppermost injection perforations).

Well Re-entry Program (cont.)

4. **Cementing Program** - Existing casing strings were all circulated to surface during the original well drilling and completion operations as follows:

Surface	13.375"	54.5#	17.5" hole	459' .	425 sx	Circ to Surf
Intermediate	3.625"	32.0#	11.0" hole	3084'	1015 sx	Circ to Surf
Production	5.5"	17.0/20.0#	· 7.875" hole	10076'	875 sx + ~560	Circ to Surf
Set CIBP	5:5"	Sized to	Casing	9200' or 9850' ·	Cap w/ 35	' cement

- 5. **Pressure Control** BOP diagram is attached to this application. All BOP and related equipment shall comply with well control requirements as described NMOCD rules and regulations. Minimum working pressure of the BOP and related equipment required for the drillout shall be 3000 psi. OCD will be notified a minimum of 4 hours prior to BOP pressure tests. The test shall be performed by an independent service company utilizing a test plug (no cup or J-packer). The results of the test shall be recorded on a calibrated test chart submitted to the OCD Artesia distric office.
- 6. **Mud Circulation System** the plugs will be drilled with 8.4 lb/gal fresh water looped through the reverse unit with all cutting recovered for disposal. Returns shall be visually monitored.
- 7. Auxiliary Well Control and Monitoring Not Applicable
- 8. **H₂S Safety** There is a low risk of H2S in this area. The operator will comply with the provisions of Onshore Oil and Gas Order #6. All personnel will wear monitoring devices and a wind direction sock will be placed on location.
- 9. Logging, Coring and Testing Ray Westall Operating is not anticipating running additional logs. No corings or drill tests will be conducted. (The well may potentially be step rate tested in the future if additional injection pressures are required.)
- 10. Potential Hazards No abnormal pressures or temperatures are expected.

Well Re-entry Program (cont.)

No loss of circulation is expected to occur. All personnel will be familiar with the safe operation of the equipment being used to drillout and reenter this well.

The maximum anticipated bottom hole pressure is 4200 psi and the maximum anticipated bottom hole temperature is 120 F.

- 11. Waste Management All drill cuttings and other wastes associated with the re-entry and drill out operations will be transported to a commercial surface waste disposal facility permitted by the Environmental Bureau of the New Mexico Oil Conservation Division.
- 12. **Anticipated Start Date** Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take two to three weeks, installation of the tank battery; berms, plumbing and other and associated equipment would be occurring during the same interval. In any event, it is not expected for the construction phase of the project to last more than 60 days, depending on availability of contractors and equipment. At the time of this submittal, the anticipated start date is:

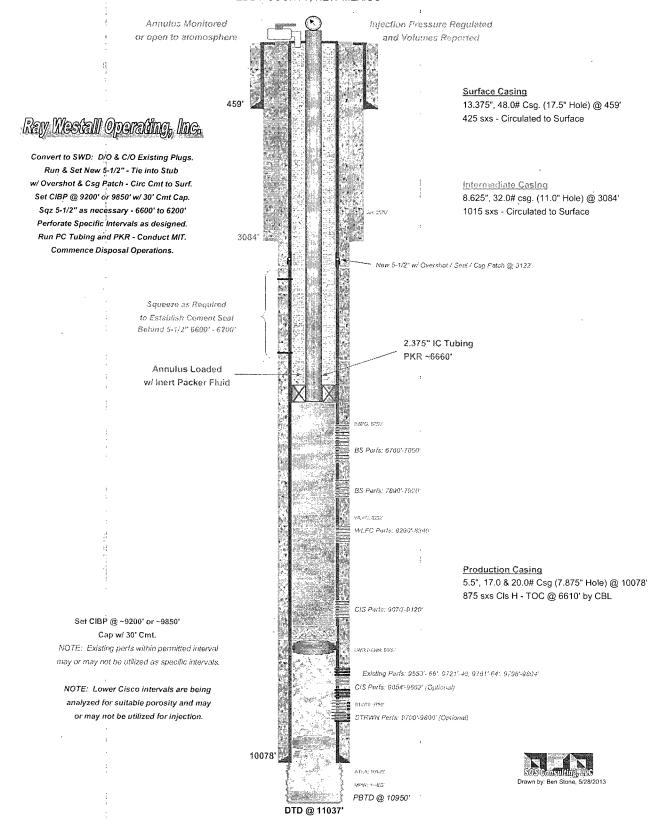
July 15, 2013.

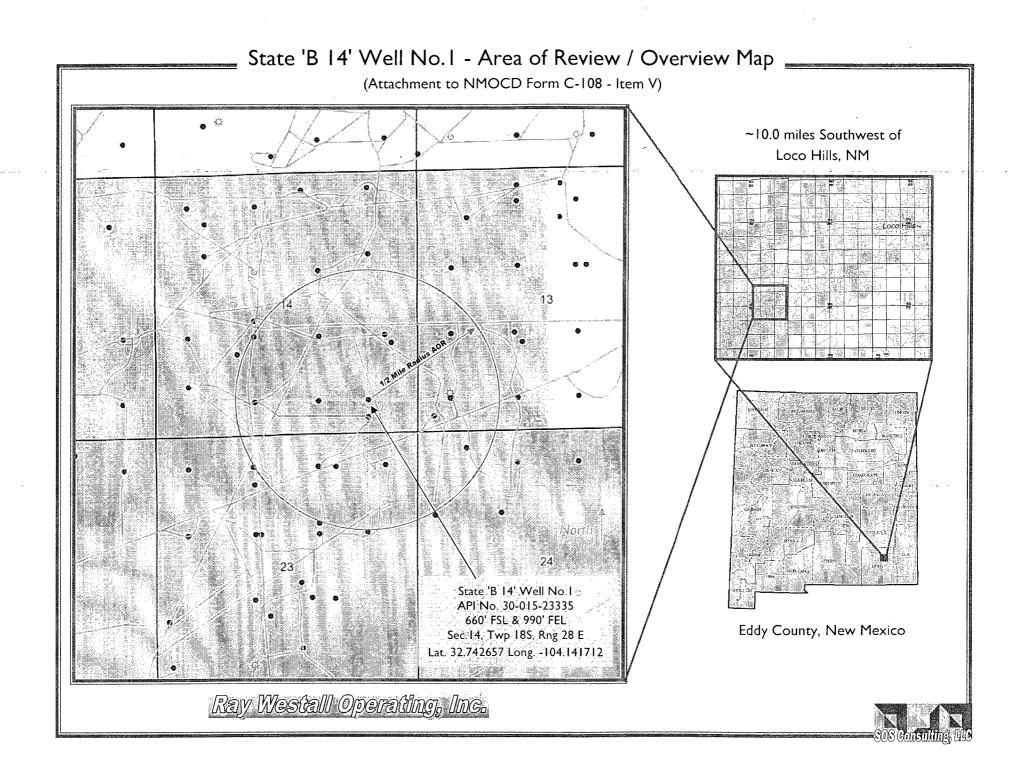
13. Configure for Salt Water Disposal - Prior to commencing any work, an NOI sundry(ies) will be submitted to configure the well for SWD and will detail the following tasks: drillout and workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure test per OCD test procedures. (Notify NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity. Anticipated daily volume is ~1000 bpd at a maximum surface injection pressure of 1352 psi.

WELL SCHEMATIC - PROPOSED State B-14 Well No.1 SWD

API 30-015-23350

660' FSL & 990' FEL, SEC. 14-T18S-R28E EDDY COUNTY, NEW MEXICO Spud Date: 6/27/1980

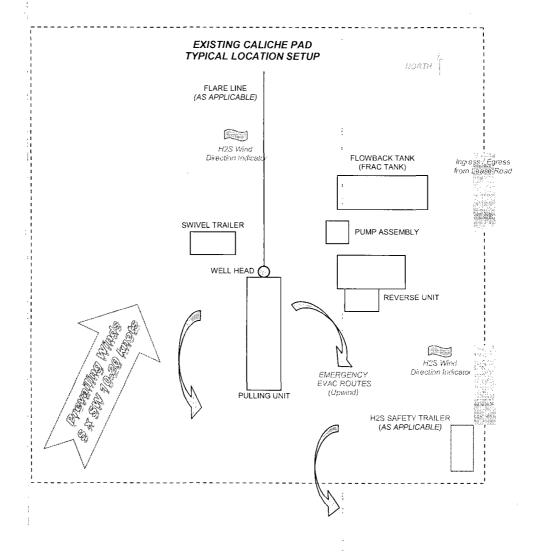




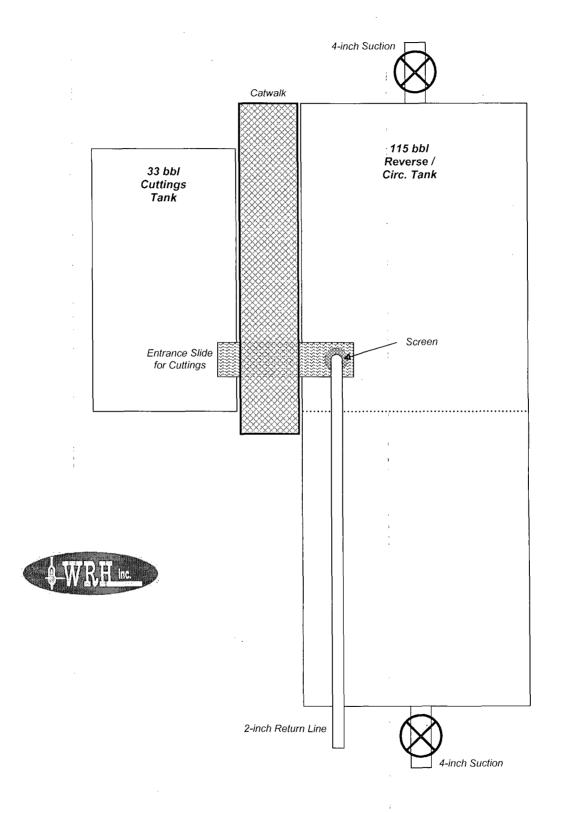
Standard Operating Procedure & Site Setup - Re-entry

ALL OPERATIONS CONDUCTED WITHIN EXISTING PAD SITE NOT EXCEEDING SURVEYED SITE. ORIENTATION PER BEST FIT.

- 1. Set up H2S wind direction indicators; brief all personnel on Emergency Evacuation Routes.
- 2. All contractors conduct safety meeting prior to current task.
- 3. If H2S levels >10ppm detected, implement H2S Plan accordingly. (E.g., cease operations, shut in well, employ H2S safety trailer & personnel safety devices, install flare line, etc. Refer to Plan.)
- 4. All equipment inspected daily. Repair / replace as required.
- 5. Visual on returns; cuttings & waste hauled to specified facility. CRI LEA COUNTY
- 6. Spills contained & cleaned up immediately. Repair or otherwise correct the situation within 48 hours before resuming operations. Notify OCD and BLM within 24 hours. Remediation started ASAP if required. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.
- 7. Subsequent sundry / forms filed as needed well returned to service.



Reverse / Circulation Tank for Workovers & Drillouts



Standard Operating Procedure - Re-entry Closed-Loop Reverse Unit Diagram

- 1. Blow Out Preventer tested prior to any operations. Notify BLM at least 4 hours prior.
- 2. Visual monitoring maintained on returns. Proceed with drillout operations accordingly.
- 3. Cuttings / waste hauled to specified facility. CRI LEA COUNTY
- 4. Spills contained & cleaned up immediately. Repair or otherwise correct the situation within 48 hours before resuming operations. Notify OCD and BLM within 24 hours. Remediation started ASAP if required. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.
- 5. Subsequent sundry / forms filed as needed well returned to service.

