State of New Mexico Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham Governor

Sarah Cottrell Propst Cabinet Secretary

Todd E. Leahy, JD, PhD Deputy Secretary Adrienne Sandoval, Division Director Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following <u>3160-4 or 3160-5</u> form.

Operator Signature Date: 10/4/2019 Well information:

30-039-07647 SAN JUAN 29 5 UNIT #049

HILCORP ENERGY COMPANY

Application Type:

P&A Drilling/Casing Change Location Change

Recomplete/DHC (For hydraulic fracturing operations review EPA Underground injection control Guidance #84; Submit Gas Capture Plan form prior to spudding or initiating recompletion operations)

Other:

Conditions of Approval:

- Notify NMOCD 24hrs prior to beginning operations.
- Add a plug 5,990'-5,906' to cover the Mancos top. OCD Mancos pick @ 5,940'

NMOCD Approved by Signature

11/7/19

Date

000 3100-3								
DI	2015) UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT SUNDRY NOTICES AND REPORTS ON WELLS				FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018			
B					5. Lease Serial No. NMSF080069			
Do not use th abandoned we	Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.				6. If Indian, Allottee or Tribe Name			
SUBMIT IN TRIPLICATE - Other instructions on page 2 1. Type of Well					7. If Unit or CA/Agreement, Name and/or No. 8910004370			
					8. Well Name and No.			
2. Name of Operator	her Contact:	TAMMY JON	ES		9. API Well No.			
HILCORP ENERGY COMPA	NY E-Mail: tajones@hil	3b. Phone No.	(include area code)		30-039-07647-0 10. Field and Pool or	Exploratory A	rea	
1111 TRAVIS STREET HOUSTON, TX 77002		Ph: 505.32	4.5185		BLANCO MESAVERDE			
Location of Well (Footage, Sec., 1	T., R., M., or Survey Description)				11. County or Parish,	State		
Sec 9 T29N R5W SWSW 099 36.735474 N Lat, 107.367813	∂OFSL 0990FWL 3 W Lon				RIO ARRIBA C	OUNTY, NI	M	
12. CHECK THE A	PPROPRIATE BOX(ES)	TO INDICA	TE NATURE O	F NOTICE,	REPORT, OR OTH	HER DATA	A	
TYPE OF SUBMISSION			TYPE OF	F ACTION				
Notice of Intent	□ Acidize	Deep	pen	Product	ion (Start/Resume)	U Water	Shut-Off	
Subsequent Report	Alter Casing	Hyd	raulic Fracturing	Reclam	ation	□ Well I	Well Integrity	
□ Final Abandonment Notice	Change Plans	Rew Construction		Temporarily Abandon				
-	Convert to Injection	D Plug	Back	U Water I	Water Disposal			
Hilcorp Energy Company req be utilized. Attached is the cu reclamation plans - (Preonsite	uests to plug & abandon th irrent wellbore schematic, p e inspection conducted 10/	e subject we proposed P& 3/19 w/Bob \$	llbore, a closed l A schematic, pro Switzer, BLM and	loop system ocedure & d Bryan Hall	will , HEC).			
					NMO	CD	Merru (1978-	
					nct 2	4 2019		
					DISTRIC	TIL		
14. I hereby certify that the foregoing i Commi Name (Printed/Typed) TAMMY	is true and correct. Electronic Submission #4 For HILCORP Ef tted to AFMSS for processin JONES	486467 verifie NERGY COMP Ing by ALBER	d by the BLM We ANY, sent to the A WETHINGTON Title REGUA	II Information Farmington on 10/04/20	n System 19 (20AMW0021SE) PECIALIST			
	Submission)		Data 10/04/2	2010				
Signatura (Electronic	300111331011)		L OR STATE	OFFICE U	SE			
Signature (Electronic	THIS SPACE FO	IN I EDEIV						
Signature (Electronic	THIS SPACE FO		the second					
Signature (Electronic	THIS SPACE FC		TitlePETROLE	EUM ENGIN	EER	Date	10/23/20	
<u>Approved By_JOHN HOEFMAN_</u> onditions of approval, if any, are attach ertify that the applicant holds legal or ea hich would entitle the applicant to conc	THIS SPACE FC	not warrant or subject lease	TitlePETROLE	EUM ENGIN	EER	Date	10/23/20	
Signature (Electronic <u>Approved By JQHN HOEFMAN</u> onditions of approval, if any, are attach ertify that the applicant holds legal or ea hich would entitle the applicant to cond itle 18 U.S.C. Section 1001 and Title 42 States any false, fictitious or fraudulent	THIS SPACE FC ed. Approval of this notice does quitable title to those rights in the fuct operations thereon. 3 U.S.C. Section 1212, make it a t statements or representations as	not warrant or subject lease crime for any p to any matter w	TitlePETROLE Office Farming erson knowingly and ithin its jurisdiction.	EUM ENGIN gton 1 willfully to m	EER ake to any department o	Date r agency of th	e United	
Signature (Electronic Approved By_JQHN HOEFMAN_ conditions of approval, if any, are attach ertify that the applicant holds legal or ea hich would entitle the applicant to cond itle 18 U.S.C. Section 1001 and Title 4: States any false, fictitious or fraudulent instructions on page 2) ** BI M REN	THIS SPACE FC red. Approval of this notice does quitable title to those rights in the fuct operations thereon. 3 U.S.C. Section 1212, make it a t statements or representations as VISED ** BI M REVISED	not warrant or subject lease crime for any p to any matter w	TitlePETROLE Office Farming erson knowingly and ithin its jurisdiction.	gton d willfully to m	EER ake to any department o	Date	e United	

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HILCORP ENERGY COMPANY SAN JUAN 29-5 UNIT 49 P&A NOI

JOB PROCEDURES

- 1. Contact NMOCD and BLM 24 hours prior to starting P&A operations.
- 2. Hold pre-job safety meeting. Verify cathodic is off. Comply with all NMOCD, BLM, and HEC safety and environmental regulations.
- 3. Check casing, tubing, and bradenhead pressures and record them in WellView. If there is pressure on the BH, contact Operations Engineer.
- 4. The following P&A procedure assumes continuous cement in the 2-7/8" x 7" casing annulus from 3,000' to 6,058' based on TOC from temperature survey (4/26/1961) and continuous cement in 7" x 8-3/4" drilled hole 650' to 3,900' based on temperature survey 4/24/1961. P&A procedures are subject to change after examining the CBL results. All cement will be Class G Neet.
- 5. MIRU service rlg and associated equipment; NU and test BOP.
- 6. RIH and set CIBP in 2-7/8" tubing @ 5,777' (50' above top perforation in Point Lookout).
- 7. RU WL, run CBL from top of CIBP at 5,777 to Surface. Send results to NMOCD and BLM to determine P&A operations going forward.
- Perform Mechanical Integrity Test (MIT) by pressure testing the 2-7/8" monobore tubing string above the CIBP set @ 5,777" to 560 psig for 30 minutes on a 2 hour chart with a 1,000 lb spring.
- 9. PU & TIH w/ slimhole work string to +1- 5,777.
- Plug #1: POINT LOOKOUT PERFORATIONS AND CLIFF HOUSE FORMATION TOP (5427* 5777*, 12 Sacks Class G Cement): Pump a +/- 350* balanced cement plug (estimated TOC @ +/- 5,427* and BOC @ +/- 5,777*). Includes 50* excess cement in 2-7/6* tubing.
- 11. TOOH w/ tubing/work string to +/- 3,705'.
- Plug #2: PICTURED CLIFFS AND FRUITLAND FORMATION TOPS (3189' 3705', 16 Sacks Class G Cement): Pump a +/- 516' balanced cement plug (estimated TOC @ +/- 3,189' and BOC @ +/- 3,706'). Includes 50' excess cement in 2-7/6" tubing.
- TOOH w/ work string. TIH and perforate squeeze holes @ +/-2,995' (5' above estimated TOC in 2-7/8" x 7" casing annulus). Establish rate into squeeze holes. RIH w/ 2-7/8" CICR and set CICR @ +/-2,860'. TIH w/ workstring to +/-2,860', sting into CICR.
- 14. Plug #3: KIRTLAND AND OJO ALAMO FORMATION TOPS (2810' 2995', 44 Sacks Class G Cement): Pump a cement squeeze leaving +/- 135' of cement below CICR in 2-7/8' tubing (estimated TOC @ +/- 2,860' and BOC @ +/- 2,995'), pump a cement squeeze leaving +/-185' of cement in 2-7/8'' x 7'' annulus (estimated TOC @ +/- 2,810' and BOC @ +/- 2,995'). Sting out of CICR and pump +/-50' balanced cement plug (estimated TOC @ +/- 2,810' and BOC @ +/-2,800'). Includes 50' excess cement in 2-7/8'' tubing and 2-7/8'' x 7'' casing annulus.
- TOOH w/ work string. TiH and perforate squeeze holes @ +-1,199". Establish rate into squeeze holes. RiH w/ 2-7/8" CICR and set CICR @ +-1,149". TiH w/ workstring to +-1,149", sting into CICR.
- 16. Plug #4: NACIMIENTO FORMATION TOP (1,099' 1,199', 29 Sacks of Class G Coment Total): Pump a cement squeeze leaving +/- 50' of cement below CICR in 2-7/8' tubing (estimated TOC @ +/- 1,149' and BOC @ +/- 1,199'), pump a cement squeeze leaving +/-100' of cement in 2-7/8" x 7" annubus (estimated TOC @ +/- 1,099' and BOC @ +/- 1,199'). Sting out of CICR and pump +/-50' balanced cement plug (estimated TOC @ +/- 1,099' and BOC @ +/-1,149'). Includes 50' excess cement in 2-7/8" tubing and 2-7/8" x 7" casing annubus.

17. TOOH w/ work string, TIH and perforate squeeze holes @ +- 340". Establish rate into squeaze holes.

18. Plug #5: SURFACE PLUG (0' - 340', 182 Sacks Class 6 Cement): Pump a balanced cement plug from surface leaving +1- 340' of cement below in 2-7/8'' tubing (estimated TOC @ +1- 0' and BOC @ +1- 340'), pump a cement squeeze leaving +1-340' of cement in 7'' casing x 8-3/4'' openhole (estimated TOC # 1- 290' and BOC @ +1- 340'), pump a cement is queeze leaving +1-50' of cement in 7'' casing x 8-3/4'' openhole (estimated TOC # 1- 290' and BOC @ +1- 340') and +1- 290' of cement in 7'' x 9-5/8'' casing annulus. Includes 50' excess cement in 2-7/8'' tubing and 2-7/8'' x 7'' casing annulus; includes 100'', excess cement in 7'' x 9-5/8'' casing annulus.

20. ND BOP, cut off casing below casing flange. Top off cement in surface casing annulus, if needed. Install a P&A marker with cement to comply with regulations. Rig down, move off location, cut off anchors, and restore location.

^{19.} TOOH w/ tubing/work string.



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HILCORP ENERGY COMPANY SAN JUAN 29-5 UNIT 49 P&A NOI

Well N	ame:	SAN JUAN 29-5 UNIT #49	Piero Name			Route		Province	_	Weil Configuration Type
0039076	547 mm (m)	009-029N-005W-M	MV	All Content	Catalona	1208	NE	N MEXICO)	Vertical
,701.00	in the second	6,714.00		13.00	Weinstein		THE R. LEWIS CO.		Staff card	Car Westman 3 al
			Ver	tical Origi	nal Hole	12/1/2020)			
MD	TVD		1 GI	acai, origi		TETTEOLO				
(fikB)	(fIKB)				Vertical sche	matic (actual)				
12.1				100			SUI	FACE CA	SING CI	EMENT: 13.00-290.00 w/ 270sx 1:1 diamix
289.0							circ	ulated 20b	bl of cer	nent.
280.0				観客			290	.03 fikB	ang, as	wo in, 9.00 m; 13.03 m
338.9										
548.9					555	385				
1,099.1										
1,148.0										
1,149		-NACIMIENTO (final)								
1,180.9							INT	ERMEDIA	TE CASI	NG CEMENT: 650.00
7,788.1							3,90	0.00: 4/23	/1961; c	emented w/ 490sx of
2,810.0							TO	C at 650' fr	om temp	erature survey on
2,000.9		-OJO ALAMO (final)				- M	4/2	4/61.	-	
2,001.9		Tubing: 1.66 in; 2.40 lb	t, J-55. 13 (D6 ftKB:						
2,990.2		-101	5,883.	06 ftKB						
2,985.1										
3,000.0					20 min 1	2000				
3,108.0		the second se								
3,236.8		-FRUITLAND (final)								
3,954.9		PICTURED CLIFFS (final)								
3,705.1	· · · · ·									
1,783.1		LEWIS (final)								
241110							2; 1	termediat	e Casin	g; 7 in; 6.46 in; 13.00
3,00019			T (Small)				PR	ODUCTIO	N CASIN	IG CEMENT; 3,000.00
4,574.0		-HUERFANITO BENTONIS	c (unai)		NAA I		6,0	58.00; 4/27 + 4% crei	/1961; c	emented w/ 220sx of t 4175' from temperat
4,949.9							SUF	vey on 4/2	7/61.	
8,621.9										
S MILL		MENEEEE (final)								
5775.9						368				
\$7780										
		POINT LOOKOUT (feat)			(1889)					
5.827.1		. ontreoondor (mild)-			191618	1886				
8.881 2		1.18" "F" Profile Nipple; 1 1	4 in: 5.883.	D6 ftKB;	200002X	ASSAULT -	Per	forated; 5,	827.10-	5.905.84; 4/29/1961
1.001.0		Expandable Chack with ut	5,883.	71 ftKB	Seeson a	20000	1			
5,842		in: 5,883.71	ftKB; 5.884	31 ftKB	2015169	INSIST.				
5.103.5					- Marian	100500				
5.933.1		-MANCOS (final)			1820				_	
6.007.9							IPR	ODUCTIO	N CASI	G CEMENT (plug)
6,001.8	1.00	Fil	6,008.00-6	3.052.00	NAME OF		6.0	52.00-6,05	8.00; 4/2	7/1961; cemented w/
8,017.1							tem	iperature s	urvey o	n 4/27/61
6,088.1					STATE A		3: F	roduction	Casing	; 2 7/8 in; 2.44 in; 13.0
		1				100	in the		ALC: NO.	



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HILCORP ENERGY COMPANY SAN JUAN 29-5 UNIT 49 P&A NOI



Hilcorp Energy San Juan 29-5 Unit 49 30-039-07647 36.7354698, -107.36779 Final Reclamation Plan Onsite with Bob Switzer on 10-3-19

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- 1. Pick up and remove all trash, metal, cable, and any foreign debris within 150' of location.
- 2. Remove anchors, if present.
- 3. Strip and stockpile topsoil.
- 4. Harvest to remove pipeline back to the dog leg.
- 5. Strip equipment, piping and wire off of facility.
- 6. P&A cathodic well.

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- 7. Bury gravel on location.
- 8. Push fill back to cut slope to re-create natural ridge and terrain.
- 9. Build silt trap on north side of location.
- 10. Reclaim Lease road.
- 11. Rip and disk compacted soil and walk down entire well pad.
- 12. Re-seed all disturbed areas. Drill where applicable at 12lbs an acre, and broadcast seed and harrow, at 24lbs an acre, all other disturbed areas. Broadcast seed a double the rate of seed. Pinion/Juniper seed mix will be used.





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UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT FARMINGTON DISTRICT OFFICE 6251 COLLEGE BLVD. FARMINGTON, NEW MEXICO 87402

Attachment to notice of Intention to Abandon:

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Re: Permanent Abandonment Well: San Juan 29-5 Unit 49 API: 30-039-07647

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."

2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.

3. CBL required after setting CIBP from 5777' to surface to confirm TOC. Submit electronic copy of the log for verification to the following addresses: jhoffman@blm.gov and Brandon.Powell@state.nm.us . Based on CBL results inside/outside plugs and volumes will be adjusted accordingly. Please review the General Requirements document to ensure volumes meet required excess inside and outside casing.

4. BLM picks formation tops as indicated in the table below for use in determining TOC for all plugs:

	Top
Nacimiento	1138
Ojo Alamo	2860
Kirtland	2990
Fruitland	3240
Pictured Cliffs	3660

5. Surface plug: perforate and circulate cement.

BLM FLUID MINERALS Geologic Report

Date Completed: 10/22/2019

Well No.	San Juan 29-5 Un	it #49	Location	990	FSL &	990	FWL
Lease No.	NMSF080069		Sec. 9	Т	29N		R05W
Operator	Hilcorp Energy C	Company	County	Rio Arriba	State	New Mexico	
Total Depth	6058'	PBTD 6008'	Formation	n Mesaverd	e (Point Lookout)		
Elevation (GL)	6701'		Elevation	(KB) 6714'			
Geologic	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks		
Formations							
San Jose Fm			Surface	1138	Surface/Fresh v	vater sands	
Nacimiento Fm			1138	2860	Fresh water sands		
Ojo Alamo Ss			2860	2990	Aquifer (fresh water)		
Kirtland Shale			2990	3240			
Fruitland Fm			3240	3660	Coal/Gas/Possi	ble water	
Pictured Cliffs Ss	3		3660	3783	Gas		
Lewis Shale			3783	4650			
Chacra			4650	5471			
Cliff House Ss			5471	5560	Water/Possible	gas	
Menefee Fm			5560	5820	Coal/Ss/Water/	Possible O&G	
Point Lookout Ss			5820	5931	Probable water	Possible O&G	
Mancos Shale			5931	PBTD			
Gallup					O&G/Water		
Graneros Shale							
Dakota Ss					O&G/Water		

Remarks:

P & A

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- BLM geologist's pick for the top of the Nacimiento formation varies from operator's pick in this well.
- Log analysis of reference well #2 (attached worksheet) indicates the Nacimiento and Ojo Alamo sands investigated contain fresh water (≤5,000 ppm TDS).
- Please ensure that the tops of the Mancos, Point Lookout, Cliff House, Pictured Cliffs, Fruitland, and Nacimiento Formations, as well as the entire Ojo Alamo fresh water aquifer identified in this report are isolated by proper placement of cement plugs. This will protect the fresh water sands in this well bore.

Reference Well:

In SameFm. Tops2) ConocoPhillipsWaterSan Juan 29-5 #78Analysis790' FNL, 1850' FELSec. 6, T29N, R05WGL 6663', KB 6674'GL 6663', KB 6674'

Prepared by: Chris Wenman

GENERAL REQUIREMENTS FOR PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES FARMINGTON FIELD OFFICE

1.0 The approved plugging plans may contain variances from the following <u>minimum general</u> requirements.

- 1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Authorized Officer, Farmington Field Office.
- 1.2 Requirements may be added to address specific well conditions.
- 2.0 Materials used must be accurately measured. (densometer/scales)

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3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.

3.1 Pits are not to be used for disposal of any hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.

4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.

- 4.1 The cement shall be as specified in the approved plugging plan.
- 4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.
- 4.3 Surface plugs may be no less than 50' in length.
- 4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.
- 4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, as calculated from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.
- 4.6 A cement bond log or other accepted cement evaluation tool is required to be run if one had not been previously ran or cement did not circulate to surface during the original casing cementing job or subsequent cementing jobs.

5.0 All cement plugs spotted across, or above, any exposed zone(s), when; the wellbore is not full of fluid or the fluid level will not remain static, and in the case of lost circulation or partial returns during cement placement, shall be tested by tagging with the work string.

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- 5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, without regard to any excess.
- 5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.
- 5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.
- 5.4 If perforations are required below the surface casing shoe, a 30 minute minimum wait time will be required to determine if gas and/or water flows are present. If flow is present, the well will be shut-in for a minimum of one hour and the pressure recorded. Short or long term venting may be necessary to evacuate trapped gas. If only a water flow occurs with no associated gas, shut well in and record the pressures. Contact the Engineer as it may be necessary to change the cement weight and additives.

6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.

- 6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.
- 6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.

7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H_2S .

8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, with the Field Manager, Bureau of Land Management, 6251 College Blvd., Suite A, Farmington, NM 87402. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show <u>date</u> well was plugged.

9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d). Unless otherwise approved.

10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.