Form 3160-4 (September 2001)

(See instructions and spaces for additional data on next page)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2004

VA/EL I	COMPLETION	OP DECOMPI	ETION REPORT	AND LOG
WELL	COMPLETION	OR RECOMPL	LETION REPURT	AND LOS

5. Lease Serial No. Jicariilla 459

16 Type of Well																
2. Name of Operator	la. Type o	f Well	Oil We					2006	FEB 2	2 <u>2</u> 6M		I '	-		e or Tribe	Name
2. Name of Operator Other	b. Type o	f Completio	on:	☐ New	Well 🔲	Work Over	Deep	en 🔲 Plu								1 XI
Shack Halls Cas Recources, Inc. S. Caser S. Caser S. Caser S. Caser S. Caser S. Caser Street				Other									nit or CA	Agree	ement Nam	ie and No.
Black Halls Gas Recources, Inc	2. Name o	of Operator						07	0 FA	RMING	TOR IN	8 1	ease Nam	ne and	Well No	
3. Address 3a. Phone No. (include area code) 50.654.1111 1.056.634.1311 1.056.634	Black Hills	Gas Resou	rces, Inc												*********	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At utifice 370 FSL & 510 FWL (SW SW) SEE VIDIOSTON LEFFEY Contents of the production of Well (SW SW) At total depth 370 FSL & 510 FWL (SW SW) 14. Date Spudded 15. Date T.D. Reached 15. Date T.	3. Addre	ss						1		clude area c	ode)					
4. Location of Well //Report location clearly and a accordance with Pederal requirements)* At surface 370 FSL & 510 FWL (SW SW) SEL & William Sec. T. R. M. on Block and Survey of At top prod interval reported below 370 FSL & 510 FWL (SW SW) At top and depth 370 FSL & 510 FWL (SW SW) 16. Date Completed 15. Date T. D. Reached 17. State Roady to Prod. Ready to Prod. Rea												30-039	-27778			
At top prod. interval reported below 370 FSL & 510 FWL (SW SW) 11.5 Ce., T., R., M., on Block and Survey or Arias 22.0 Central Section 12. Country or Parish 13. State 13. State 14. Date Spudded 15. Date T.D. Reached 16. Date Completed 17. Elevations (DF, R.R.R. R.T., GL)* 17. Elevations (DF, R.R.R. R.T., GL)* 17. Elevations (DF, R.R.R. R.T., GL)* 18. Total Depth MD 4012" 19. Plug Back T.D.: MD 3964 20. Depth Bridge Plug Set: MD 17. Elevations (DF, R.R.R. R.T., GL)* 17. Elevations (DF, R.R.R. R.T., GL)* 17. Elevations (DF, R.R.R. R.T., GL)* 18. Total Depth MD 4012" 19. Plug Back T.D.: MD 3964 20. Depth Bridge Plug Set: MD 17. Elevations (DF, R.R.R. R.T., GL)* 17. Elevations (DF, R.R.R. R.T., GL)* 17. Elevations (DF, R.R.R. R.T., GL)* 18. State 18.		•	•		•			-	•	١.	1			Pool, o	r Explorate	огу
At top prod. interval reported below 370 FSL & 510 FWL (SW SW) 11.5 Ce., T., R., M., on Block and Survey or Arias 22.0 Central Section 12. Country or Parish 13. State 13. State 14. Date Spudded 15. Date T.D. Reached 16. Date Completed 17. Elevations (DF, R.R.R. R.T., GL)* 17. Elevations (DF, R.R.R. R.T., GL)* 17. Elevations (DF, R.R.R. R.T., GL)* 18. Total Depth MD 4012" 19. Plug Back T.D.: MD 3964 20. Depth Bridge Plug Set: MD 17. Elevations (DF, R.R.R. R.T., GL)* 17. Elevations (DF, R.R.R. R.T., GL)* 17. Elevations (DF, R.R.R. R.T., GL)* 18. Total Depth MD 4012" 19. Plug Back T.D.: MD 3964 20. Depth Bridge Plug Set: MD 17. Elevations (DF, R.R.R. R.T., GL)* 17. Elevations (DF, R.R.R. R.T., GL)* 17. Elevations (DF, R.R.R. R.T., GL)* 18. State 18.	At sur	face 370'	FSL & 510) FWL (S	wsw) S	ee vidk	otro	nc lett	er	date	4	East B	lanco Picti	ured C	liffs	
At tool depth 370 FRL & 510 FRM, (SW SW) Rio Arriba NM 14. Date Spudded 15. Date T.D. Reached 15. Date Completed 17. Elevations (DF, RKB, RT, GL)* 925/05 929/05 19. Plug Back T.D.: MD 3964* 20. Depth Bridge Plug Set: MD TVD 17. Devations (DF, RKB, RT, GL)* 15. Total Depth: MD 4012 19. Plug Back T.D.: MD 3964* 20. Depth Bridge Plug Set: MD TVD 17. Devations (DF, RKB, RT, GL)* 16. Size Other Mechanical Logs Run (Submit copy) of each) 22. Was well corred? No Yes (Submit report) 17. Size Other Mechanical Logs Run (Submit copy) of each) 22. Was well corred? No Yes (Submit report) 17. Size Other Mechanical Logs Run (Submit copy) of each 17. Size Other Mechanical Logs Run (Submit copy) 17. Size Other Run (Submit copy) 17. Size O				`	,								- A			•
9/23/05 9/29/05 19. Plug Back T.D.: MD 3964 20. Depth Bridge Plug Set: MD TVD 17. Depth ITVD 19. Plug Back T.D.: MD 3964 20. Depth Bridge Plug Set: MD TVD 21. Type Electric & Other Mechanical Logs Run (Submit copy of each) 22. Was well cored? No Yes (Submit analysis) Yes (Submit analysis) Yes (Submit analysis) Yes (Submit copy) Yes (S	At tota	al depth 3	70' FSL &	510' FWL	(SW SW)								•	Parish	1	tate
18. Total Depth: MD 4012' 19. Plug Back T.D.: MD 3964' 20. Depth Bridge Plug Set	14. Date	Spudded		15. Dat	te T.D. Rea	iched						17. E	levations	(DF,	RKB, RT,	GL)*
TVD				9/29/05					&A [KB 7	316 GL 7	303		
Was DST run? Directional Survey? No Yes (Submit report)	18. Total)	19.	Plug Back T.D.		3964'		20. Dept	h Bridge Pl					
Hole Size Size/Grade Wt. (#/ft.) Top (MD) Bottom (MD) Stage Cementer Depth No. of Sks. & Sturry Vol. (BBL) Cement Top* Amount Pulled										Was	DST run?	$\overline{\square}$	No 🗀	Yes	(Submit re	port)
Hole Size Size/Grade Wt. (#ff.) Top (MD) Bottom (MD) Depth Type of Cement (BBL) Cement 10p Amount Pulled	23. Casing	g and ∟iner	Kecora (R	eport all s	irings set in	well)	Ston	re Cementer	No.	of Sks &	Slarry 1	/ol				
Circ 0 0 0 0 0 0 0 0 0	Hole Size	Size/Gra	ide Wt.	(#/ft.)	Top (MD)	Bottom (MD)	Stag						Cement To	op*	Amou	nt Pulled
Total Tota	12-1/4"	8-5/8"	24	l Ib	0,	268'			1	80 sx			surface			·
24. Tubing Record										-			circ 10 b	b		
Circ 0 bbl 10 surface 24 Tubing Record 5ize Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Size Size Depth Set (MD) Size Depth Set (MD) Size Siz													to surfac	;		
24. Tubing Record Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Packe	7-7/8"	5-1/2"	17	lb lb	0'	3998'			6	80 sx			Surface	0	20'	
24 Tubing Record Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth							1						circ 0 bb	1		
Size Depth Set (MD) Packer Depth (MD) 2-3/8" 3888" 25. Producing Intervals Formation TOP Bottom Perforated Interval A) Pictured Cliffs 3888" 26. Perforation Record Formation TOP Bottom Perforated Interval Size No. Holes Perf. Status Open D) 27. Acid, Fracture, Treatment, Cement Squeeze, Etc. Depth Interval Depth Interval Amount and Type of Material Amount and Type of M						_L							to surface	e		
2-3/8" 3888' 26. Perforation Record Size No. Holes Perf. Status																
25. Producing Intervals Formation TOP Bottom Perforated Interval Size No. Holes Perf. Status A) Pictured Cliffs 3888' 3922' 3888-3922' 3.125 68 Open B) C. D) 27. Acid, Fracture, Treatment, Cement Squeeze, Etc. Depth Interval Pictured Cliffs stimulted w/ 1,955,000 MSCF Nitrogen & 100,920 LBM 20/40 Brady propagant Pictured Cliffs stimulted w/ 1,955,000 MSCF Nitrogen & 100,920 LBM 20/40 Brady propagant 28. Production - Interval A Date First Test Production Test Oil Gravity Flowing Production Method Production - Interval B Date First Test Flaw Press Size Flaw Press Csg Flaw Press Csg Press Rate BBL Gas MCF BBL Gas Water Gas: Oil Gravity Gas Garvity Production Production Method Production Method Production Method Production - Interval B Date First Test BBL Corr. API Gas Garvity Gas Production Method Production Method Production Method Production Method Well Status Production Method Well Status WARR 0 6 2006 Choke BBL Corr. API Gravity Production Method Well Status WARR 0 6 2006 Choke BBL Corr. API Gravity Production Method Well Status WARR 0 6 2006	Size			Packer I	Depth (MD)	Size	Dept	th Set (MD)	Packer	Depth (MD)	Size	e ;	Depth Set	(MD)	Packer I	Depth (MD)
Formation TOP Bottom Perforated Interval Size No. Holes Perf. Status A) Pictured Cliffs 3888' 3922' 3888-3922' 3.125 68 Open B) C) D) 27. Acid, Fracture, Treatment, Cement Squeeze, Etc. Depth Interval Pictured Cliffs stimulted w/ 1,955,000 MSCF Nitrogen & 100,920 LBM 20/40 Brady proppant Pictured Cliffs stimulted w/ 1,955,000 MSCF Nitrogen & 100,920 LBM 20/40 Brady proppant 28. Production - Interval A Date First Test Production BBL MCF BBL Corr. API Gravity Flowing Produced Date Test Rate BBL MCF BBL Ratio Producing BBL MCF BBL Gas Oil Gravity Gas Gravity Production Method Producing 28a. Production - Interval B Date First Test Press Call BBL MCF BBL Gravity Gas Gravity Production Method Producing BBL MCF BBL Gravity Gas Gravity Production Method Producing BBL MCF BBL Gravity Gas Gravity Production Method Producing BBL MCF BBL Gravity Gas Gravity Production Method Producing BBL MCF BBL Gravity Gas Gravity Gas Gravity Production Method Production Method BBL MCF BBL Gravity Gas Gravity Gas Gravity Gas Gravity Production Method BBL MCF BBL Gravity Gas Gravity Gas Gravity Gas Gravity Production Method BBL MCF BBL Gravity Gas Gravity Gas Gravity Production Method BBL MCF BBL Gravity Gas Gravity Production Method BBL MCF BBL BBL BBL MCF BBL	-			<u> </u>			↓				<u> </u>					
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B) C) D) 27. Acid, Fracture, Treatment, Cement Squeeze, Etc. Depth Interval Amount and Type of Material BBL Oil Gravity Froduced Date Test Produced Date Test Production - Interval A Test Production BBL Oil Gas BBL Oil Gas BBL Ratio Production Well Status Production Method Production Flow Flowing Test BBL Oil Gas BBL Oil Gravity Flowing Test Production - Interval B Date First Test Production - Interval B Date First Test Pross Size Flav Test BBL Oil Gas BBL Oil Gravity Flowing Test BBL Oil Gas BBL Oil Gravity Flowing Test Production - Interval B Date First BBL Oil Gas BBL Oil Gravity Flowing Test Production Method Flow Flav Flow Flav Flow Flav Flow Flav Flow Flav Flav Flav Flav Flav Flav Flav Flav	<u> </u>					 							es			<u>s</u>
C) D) 27. Acid, Fracture, Treatment, Cement Squeeze, Etc. Depth Interval Amount and Type of Material 3888'-3922' Pictured Cliffs stimulted w/ 1,955,000 MSCF Nitrogen & 100,920 LBM 20/40 Brady proppant 28. Production - Interval A Date First Produced Date Tested Production 11/17/05 11/8/05 24 Choke Top. Press Csg Flgw Press Size Figure Press Rate BBL MCF BBL Gas Water BBL Gas Water BBL Ratio Date First Test Hours Press Call Show Froduction BBL Gas Water BBL Gas Water Gas: Oil Gravity Gas Gravity Flowing 28a. Production - Interval B Date First Test Hours Press Call Show Froduction BBL Gas Water BBL Gravity Gas Gravity Production Method Gravity Gas Gravity Flowing Date First Test Hours Test Hours Press BBL MCF BBL Gas Water Gravity Gas Gravity Production Method Gravity Gas Gravity Press Rate BBL MCF BBL Gas Water Gravity Gas Gravity Production Method Gravity Gas Gravity Production Method Gravity Gas Gravity Gas Gravity Production Method Gravity Gas Gravity Gas Gravity Gas Gravity Gas Gravity Gas Gravity Gravity Gas Gravity Gravity Gas Gravity Gravity Gas Gravity Gravity Gravity Gas Gravity Gravity Gas Gravity Gravity Gas Gravity Gravity Gravity Gravity Gas Gravity Gravity Gravity Gravity Gas Gravity		Cliffs		-	3888	3922	3888-3922				3.125	68			Open	
D) 27. Acid, Fracture, Treatment, Cement Squeeze, Etc. Depth Interval 3888-3922* Pictured Cliffs stimulted w/ 1,955,000 MSCF Nitrogen & 100,920 LBM 20/40 Brady proppant 28. Production - Interval A Date First Produced Date Test Production 11/7/05 11/8/05 24 Choke Tbg. Press Csg Flgw Press Rate BBL Date First Test Hours Froduced Date Test Hours BBL Gas Water Gas Water Gas: Oil Gravity Flowing Gas Water Gas: Oil Gravity Flowing Flowing Well Status Production - Interval B Date First Test Hours Fress Call Date Tested Production BBL Gas Water BBL Gas Water Gas: Oil Gravity Gas Gas Oil Gravity Flowing Production Method Production Well Status Production BBL Gas Water Gas: Oil Gravity Gas Gravity Production Method Production BBL Water Gas: Oil Gravity Production Method Production BBL Water BBL Gas BBL Gas Water Gas: Oil Gravity Production Method Well Status Water Gas: Oil Gravity Production Method Water BBL Wate				_			 									
27. Acid, Fracture, Treatment, Cement Squeeze, Etc. Depth Interval Amount and Type of Material Amoun			<u></u>	-	·		 						- V	OVAV	9	
Depth Interval 3888'-3922' Pictured Cliffs stimulted w/ 1,955,000 MSCF Nitrogen & 100,920 LBM 20/40 Brady proppant 28. Production - Interval A Date First Production Test Production Test Production BBL Gas Water Gas: Oil Gravity Choke Tbg Press Stze Figw Press Size Test Hours First Production BBL Gas Water Gas: Oil Well Status Test BBL Gas Water Gas: Oil Gravity Ratio Test Production Method Test Production Test BBL Gas Water Gas: Oil Gravity Flowing Test BBL Gas Water Gas: Oil Gravity Production Test BBL Gas Water Gas: Oil Gravity Test BBL Gas Water Gas: Oil Gravity Test Gravity Production Method Test Production BBL Gas Water Gas: Oil Gravity Test Gravity Test Production Method Test Production BBL Gas Water Gas: Oil Gravity Test Production BBL Gas Water Gas: Oil Well Status Test Production BBL Gas Water Gas: Oil Well Status Test Production BBL Gas Water Gas: Oil Well Status MAR 0 6 2006		Fracture, Tr	eatment, C	ement Sai	ueeze, Etc.	<u> </u>	<u> </u>				L		-6+	<u>04</u> ,	10 77 F	
28. Production - Interval A Date First Test Hours Tested Production BBL MCF BBL Corr. API Gravity Flowing 11/17/05 11/8/05 24				<u> </u>				A	mount a	nd Type of N	Material	₹ \$	^			7
28. Production - Interval A Date First Test Date Tested Date Tested Date Tested Date Tested Production BBL MCF BBL Corr. API Gravity Flowing 11/17/05 11/8/05 24 758 Choke Tbg Press Csg Flgw Press Size Flgw Press Tested Date Tested Date Tested Date Tested Date Tested Production BBL MCF BBL Gas Water Gas: Oil Ratio Producing 28a. Production - Interval B Date First Test Hours Test Date Tested Production BBL MCF BBL Gas Water Gas: Oil Gravity Gas Gravity Choke Tbg Press Call Caster Date Tested Production BBL MCF BBL Gas Water Gas: Oil Gravity Gas Gravity Choke Tbg Press Call Caster BBL Gas Water Gas: Oil Gravity Gas Gravity Choke Tbg Press Call Caster BBL Gas Water Gas: Oil Well Status MAR 0 6 2006	3888'-3922'			Picture	d Cliffs stimu	ulted w/ 1,955,000 M	ISCF Nit	trogen & 100,9	20 LBM 2	20/40 Brady p	roppant	B'3	RAGA	2 ହୁଣ୍ଡନ	8 9	
28. Production - Interval A Date First Produced Date Test Date Production Date Flow Press Size Flow Press Call Choke Production Date First Produced Date Tested Date Tested Date Date Flow Press Call Choke Production Date First Produced Date Tested Date Date First Produced Date Tested Date Date Flow Press Call Choke Date Production Date Date First Produced Date Date Flow Press Call Date Date Flow Press Call Choke Date Production Date Date Flow Press Call Choke Production Date Date Production Date Date Flow Press Date Production Date Date Date Production Date Date Production Date Date Date Date Date Date Date Date												Pen	RD .	- 200 - 10/8	-D	23
28. Production - Interval A Date First Produced Date Tested Date Date Fly Production Date Date Size Flyw Press Size Test Date First Date Froduction - Interval B Date First Test Hours Test Date Froduction Date Date Froduction Date Date First Date Froduction Date Date Froduction Date Date Froduction Date Date Production Date Date Date Production Date Date Date Production Date Date Date Date Date Date Date Date													300 PY	AIG.	DW	23
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Choke Size Flyw Press Csg. Press Size Flyw Press Date First Produced Date Tested Production BBL MCF BBL Gas Water BBL Gas Water BBL Corr. API Gas Gravity Choke Tbg. Press Call Call Press Call Press Rate BBL MCF BBL Ratio MAR 0 6 2006	Produced	Date	Tested		BBL	MCF B	at e r BL			Gravity		(2013C) N				
Size Flyw Press Rate BBL MCF BBL Ratio 28a. Production - Interval B Date First Produced Date Tested Production BBL MCF BBL Corr. API Gas Gravity Choke Tbg. Press Call 24 Hr. Oil Gas BBL MCF BBL Ratio Choke Flyw Press Rate BBL MCF BBL Ratio MAR 0 6 2006				24 Hr	Oil		ater	Gar: Oil		Well Crass		ing	200	5/1/C/F	ستعا	
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Choke Tbg. Press. Call 24 Hr. Oil Gas Water Gas: Oil Well Status Size Flwg Press Rate BBL MCF BBL Ratio											Produ	iction Meth	od	1		70.
Choke Size Tbg. Press Call Press SIze Size Size Size Size Size Size Size Si	rioduced	Date	i ested	rioduction	l per	MCF B	BL	Corr. AP	ī	Gravity				, #		. •••
Size Flwg Press Rate BBL MCF BBL Ratio	Choke	Tbg. Press	Call	24 Hr.	Oil	Gas V	ater	Gas: Oil		Well State	<u> </u>			1—	MAR (6 200c
	Size	Flwg.	Press		BBL	MCF E	BL						į	I FA	TAIN POTON	FIELD

28b. Produ	ction - Inter	val C										
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method			
Choke Size	Tbg Press Fiwg SI	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status				
28c. Produ	ction - Inter	val D		<u> </u>				· · · · · · · · · · · · · · · · · · ·				
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method			
Choke Size	Thg Press Flwg. SI	Csg. Press	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status				
29. Dispos	ition of Gas	(Sold use	d for fuel, v	ented, etc.)								
Show tests,	all import	ant zones o	nclude Aqual of porosity a al tested, cu	and conten	ts thereof: C	Cored interva	als and all drill-stem and shut-in pressures	31. Formatio	on (Log) Markers			
Form	ation	Тор	Bottom		Descr	iptions, Cont	tents, etc.		Name	Top Meas. Depth		
									San Jose Nacimiento Ojo Alamo Kirtland Fruitland Pictured Cliffs Lewis	13' 2190' 3344' 3594' 3835' 3881' 3992'		
32. Additi	onal remari	ks (include	plugging pr	ocedure):								
1 Eld 5 Su	ndry Notice	chanical Lo for pluggin	gs (1 full se	nt verificati	ion 6 (Geologic Rep Core Analysis	5 7 Other: _		irectional Survey	ructions)*		
	(please pri						Title Admin. Te			·		
Signa	\bigcap	Me	50	<u>M</u>			Date 2/2/06					
Title 18 U	S.C. Section	on 1001 an	d Title 43 U	J.S.C. Secti	ion 1212 ma	ke it a crime	for any person know	ingly and willf	fully to make to any departme	ent or agency of the United		

States any false fictitious or fraudulent statements or representations as to any matter within its jurisdiction.