Form 5160-5 (September 2001)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

I & E Hobbs

FORM APPROVED OM B No. 1004-0135 Expires: January 31, 2004

5. Lease Serial No.

SUNDRY	NOTICES AND REP	ORTS ON WELLS	LC 02950	LC 029509B				
Do not use th	is form for proposals to	drill or to re-enter an	6. If Indian,	Allottee or Tribe Name				
	ell. Use Form 3160 - 3 (A		N/A					
OUDWIT IN TO	IDLICATE Other in the		7. If Unit or C	CA/Agreement, Name and/or No.				
	PLICATE- Other instru	uctions on reverse side.	N/A	in in the second of the second				
Type of Well Oil Well 🗆	Gas Well□□ ✓ Other	HOBBS	8. Well Nam	and No				
Name of Operator Frontier Fiel	d Samulana C	J. JOBS C	Maljama	r AGi #1				
Address	d Services /	3b. Phone No. (include area code)	9. API Well 3002540					
4200 Skelly Dr., St. 700, Tulsa		918-388-8408RECEIVED	10. Field and	Pool, or Exploratory Area				
Location of Well (Footage, Sec.,	T., R., M., or Survey Description)			ory (Lower Wolfcamp) Parish, State				
130' FSL, 1813' FEL Sec. 21, Acid Gas Injection Well, Unor	Γ 17 S, R 32 E, NMPM, Lea Co thodox Location	. NM	Lea	Taristi, State				
12. CHECK A	PPROPRIATE BOX(ES) TO	INDICATE NATURE OF NO	OTICE, REPORT, OR	OTHER DATA				
TYPE OF SUBMISSION		TYPE OF AC	TION					
	Acidize	Deepen Prod	uction (Start/Resume)	Water Shut-Off				
Notice of Intent	Alter Casing		amation	Well Integrity				
7.	Casing Repair		omplete	Other formation fluid				
Subsequent Report	Change Plans		porarily Abandon	analysis				
Final Abandonment Notice	Convert to Injection		er Disposal					
ANALYTE Alkalinity, Bicarbonate Calcium Alkalinity, Carbonate Chloride Conductivity (uS/cm) Density (g/mL) Magnesium Potassium Sodium Sulfate TDS Alkalinity, Total pH (pH units)	SAMPLE #1 195 1560 ND 132000 376000 1.145 401 325 84400 3340 225000 160 7.70	s are summarized below and the SAMPLE #2 317 1440 ND 126000 365000 1.135 510 340 80700 3710 213000 260 7.51		iched. ig/L unless otherwise indicated)				
		7.51						
 I hereby certify that the fore Name (Printed/Typed) 	egoing is true and correct							
Alberto A. Guti	errez, RG	Title Consultant	to Frontier Field Service	es/AkA Energy				
Signature		Date	10/22/2012	132				
/	THIS SPACE FOR	EDERAL OR STATE O	OFFICE USE					
			1 ACCEP	ROLEUM ENGINEER				
Approved by		Title	Par	ale ENGINEEN				
Conditions of approval, if any, are	attached. Approval of this notice all or equitable title to those rights it conduct operations thereon.		1/	AN 1 3 2016				
Title 18 U.S.C. Section 1001 and Tit	le 43 U.S.C. Section 1212, make it a	crime for any person knowingly as to any matter within its jurisdiction	on.	department or agency ditthe Unit				
	surements of representations	2 any maner minin no jurisdictiv	BUREAU	OF LAND MANAGEMENT				
(Instructions on page 2)			CAR	LSBAD FIELD OFFICE				



October 22, 2012

RUSSELL BENTLEY
P B ENERGY
16285 PARK TEN PLACE, SUITE 400
HOUSTON, TX 77084

RE: MALJAMAR AGI #1

Enclosed are the results of analyses for samples received by the laboratory on 10/03/12 16:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list on accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accredited certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg D. Keine

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

P B ENERGY

16285 PARK TEN PLACE, SUITE 400

HOUSTON TX, 77084

Project: MALJAMAR AGI #1

Project Number: NONE GIVEN
Project Manager: RUSSELL BENTLEY

Fax To: (281) 589-5865

Reported:

22-Oct-12 12:07

Laboratory ID	Matrix	Date Sampled	Date Received
H202416-01	Water	03-Oct-12 00:00	03-Oct-12 16:55
H202416-02	Water	03-Oct-12 00:00	03-Oct-12 16:55
	H202416-01	H202416-01 Water	H202416-01 Water 03-Oct-12 00:00

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene



Analytical Results For:

P B ENERGY

16285 PARK TEN PLACE, SUITE 400

HOUSTON TX, 77084

Project: MALJAMAR AGI #1

Project Number: NONE GIVEN

Project Manager: RUSSELL BENTLEY

Fax To: (281) 589-5865

Reported:

22-Oct-12 12:07

#1 H202416-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	ıl Laborat	ories		1-1-1-			
Inorganic Compounds			3/25	A WALL	3.1			14-1-14-14	
Alkalinity, Bicarbonate	195	5.00	mg/L	1	2091506	HM	17-Oct-12	310.1	
Calcium	1560	1.60	mg/L	1	2091504	НМ	17-Oct-12	SM3500Ca- D	
Alkalinity, Carbonate	ND	0.00	mg/L	1	2091506	HM	17-Oct-12	310.1	
Chloride*	132000	4.00	mg/L	1	2100807	CK	17-Oct-12	4500-Cl-B	
Conductivity*	376000	1.00	uS/cm	1	2101702	HM	16-Oct-12	120.1	
Density	1.145		g/mL	4	2101719	HM	17-Oct-12	SM 2710F	
Magnesium	401	1.00	mg/L	1	2091504	HM	17-Oct-12	SM3500Mg- E	
pH*	7.70	0.100	pH Units	1	2101702	HM	16-Oct-12	150.1	
Potassium	325	1.00	mg/L	1	2091504	HM	17-Oct-12	HACH 8049	
Sodium	84400	1.00	mg/L	1	2091504	HM	17-Oct-12	Calculation	
Sulfate*	3340	10.0	mg/L	1	2101204	AP	12-Oct-12	375.4	
TDS*	225000	5.00	mg/L	1	2101003	HM	10-Oct-12	160.1	
Alkalinity, Total*	160	4.00	mg/L	1	2091506	HM	24-Sep-12	310.1	

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Celey D. Keine



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

P B ENERGY

16285 PARK TEN PLACE, SUITE 400

HOUSTON TX, 77084

Project: MALJAMAR AGI #1

Project Number: NONE GIVEN

Project Manager: RUSSELL BENTLEY

Fax To: (281) 589-5865

Reported: 22-Oct-12 12:07

#2 H202416-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	al Laborat	ories					
Inorganic Compounds									
Alkalinity, Bicarbonate	317	5.00	mg/L	1	2091506	НМ	17-Oct-12	310.1	AG*
Calcium	1440	1.60	mg/L	1	2091504	НМ	17-Oct-12	SM3500Ca- D	
Alkalinity, Carbonate	ND	0.00	mg/L	1	2091506	HM	17-Oct-12	310.1	
Chloride*	126000	4.00	mg/L	1	2100807	CK	17-Oct-12	4500-CI-B	
Conductivity*	365000	1.00	uS/cm	1	2101702	HM	16-Oct-12	120.1	
Density	1.135		g/mL	4	2101719	HM	17-Oct-12	SM 2710F	
Magnesium	510	1.00	mg/L	1	2091504	HM	17-Oct-12	SM3500Mg- E	
pH*	7.51	0.100	pH Units	1	2101702	HM	16-Oct-12	150.1	
Potassium	340	1.00	mg/L	1	2091504	HM	17-Oct-12	HACH 8049	
Sodium	80700	1.00	mg/L	1	2091504	HM	17-Oct-12	Calculation	
Sulfate*	3710	10.0	mg/L	1	2101204	AP	12-Oct-12	375.4	
TDS*	213000	5.00	mg/L	1	2101003	HM	10-Oct-12	160.1	
Alkalinity, Total*	260	4.00	mg/L	1	2091506	НМ	17-Oct-12	310.1	

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Analytical Results For:

P B ENERGY

16285 PARK TEN PLACE, SUITE 400

HOUSTON TX, 77084

Project: MALJAMAR AGI #1

Project Number: NONE GIVEN

Project Manager: RUSSELL BENTLEY

Fax To: (281) 589-5865

Reported:

22-Oct-12 12:07

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2091504 - *** DEFAULT PREP ***								1		
Blank (2091504-BLK1)				Prepared: 1	13-Sep-12 A	Analyzed: 1	5-Sep-12		196	100
Calcium	ND	1.60	mg/L							
Magnesium	ND	1.00	mg/L							
Potassium	ND	1.00	mg/L							
LCS (2091504-BS1)				Prepared:	13-Sep-12 A	Analyzed: 1	5-Sep-12			
Calcium	20.8		mg/L	20.0		104	80-120			
Magnesium	53.5		mg/L	50.0		107	80-120			
Potassium	3.10		mg/L	3.00		103	80-120			
Duplicate (2091504-DUP1)	Sou	rce: H202190-	01	Prepared:	13-Sep-12 A	Analyzed: 1	5-Sep-12			
Magnesium	486	1.00	mg/L	PART SHITE	583			18.1	20	
Potassium	800	1.00	mg/L		825			3.08	20	
Calcium	2770	1.60	mg/L		2640			4.81	20	
Batch 2091506 - General Prep - Wet Chem									417, 11	ė.
Blank (2091506-BLK1)				Prepared &	& Analyzed:	12-Sep-12				
Alkalinity, Carbonate	ND	0.00	mg/L		To I J				Un reduction	Phy Lt.
Alkalinity, Bicarbonate	ND	5.00	mg/L							
Alkalinity, Total	ND	4.00	mg/L							
LCS (2091506-BS1)				Prepared &	& Analyzed	: 12-Sep-12	2			
LCS (2071300-DS1)				riebmen e						
Alkalinity, Carbonate	ND	0.00	mg/L	riopaica			80-120			
	ND 132	0.00 5.00	mg/L mg/L	- Toparou o			80-120 80-120			
Alkalinity, Carbonate				100		108				
Alkalinity, Carbonate Alkalinity, Bicarbonate	132	5.00	mg/L	100	& Analyzed		80-120 80-120			
Alkalinity, Carbonate Alkalinity, Bicarbonate Alkalinity, Total	132	5.00	mg/L	100	& Analyzed		80-120 80-120		20	
Alkalinity, Carbonate Alkalinity, Bicarbonate Alkalinity, Total LCS Dup (2091506-BSD1)	132 108	5.00 4.00	mg/L mg/L	100	& Analyzed		80-120 80-120	3.72	20 20	

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Analytical Results For:

P B ENERGY

16285 PARK TEN PLACE, SUITE 400

HOUSTON TX, 77084

Project: MALJAMAR AGI #1

Project Number: NONE GIVEN

Project Manager: RUSSELL BENTLEY

Fax To: (281) 589-5865

Reported:

22-Oct-12 12:07

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100807 - General Prep - Wet Chem		174			Erd w		1			
Blank (2100807-BLK1)				Prepared &	Analyzed:	08-Oct-12				
Chloride	ND	4.00	mg/L		The All					
LCS (2100807-BS1)				Prepared &	Analyzed:	08-Oct-12				
Chloride	100	4.00	mg/L	100		100	80-120			
LCS Dup (2100807-BSD1)				Prepared &	Analyzed:	08-Oct-12				
Chloride	104	4.00	mg/L	100		104	80-120	3.92	20	
Batch 2101003 - Filtration			1.75	111	K. b					
Blank (2101003-BLK1)				Prepared &	Analyzed:	09-Oct-12				
TDS	ND	5.00	mg/L							
LCS (2101003-BS1)				Prepared &	Analyzed:	09-Oct-12				
TDS	251		mg/L	240		105	80-120		F 3	
Duplicate (2101003-DUP1)	Sou	rce: H202447-	-01	Prepared &	Analyzed:	09-Oct-12				
TDS	5320	5.00	mg/L	de de	5380			1.12	20	
Batch 2101204 - General Prep - Wet Chem						- 12			*	
Blank (2101204-BLK1)				Prepared &	Analyzed:	12-Oct-12				
Sulfate	ND	10.0	mg/L	A STATE	444				No.	
LCS (2101204-BS1)				Prepared &	Analyzed:	12-Oct-12				
Sulfate	16.7	10.0	mg/L	20.0		83.6	80-120	1 4	51875	SWITE,

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Analytical Results For:

P B ENERGY

16285 PARK TEN PLACE, SUITE 400

HOUSTON TX, 77084

Project: MALJAMAR AGI #1

Project Number: NONE GIVEN

Project Manager: RUSSELL BENTLEY

Fax To: (281) 589-5865

Reported:

22-Oct-12 12:07

Inorganic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2101204 - General Prep - Wet Chem					I a					
LCS Dup (2101204-BSD1)				Prepared &	Analyzed:	12-Oct-12				
Sulfate	19.3	10.0	mg/L	20.0		96.6	80-120	14.4	20	
Batch 2101702 - General Prep - Wet Chem								p=1	412	
LCS (2101702-BS1)			- 4	Prepared &	Analyzed:	16-Oct-12			3 4 5	
Conductivity	496		uS/cm	500		99.2	80-120			
pH	7.08		pH Units	7.00		101	90-110			
Duplicate (2101702-DUP1)	Sour	rce: H202484	-01	Prepared &	& Analyzed:	16-Oct-12				
pH	7.27	0.100	pH Units	Think.	7.23			0.552	20	
Conductivity	5460	1.00	uS/cm		5450			0.183	20	

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Celey D. Keine



ND

Notes and Definitions

RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Analyte NOT DETECTED at or above the reporting limit

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 8 of 9



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name:	turson's PB En	3	3	(3)	7 70				ANALY	ANALYSIS REQUEST	QUEST		
Project Manager:	Jusell Butter	0	٥	P.O. #:									
Address:		0		Company:			le	le					
City:	State:	Zip:		Attn:			mp	np					-
Phone #:	Fax #:			Address:			a	Sa					
Project #:	Project Owner:			City:			لم	sh					- Charleston and the Control of the
Project Name: M	aliamor Ac	HO	1#1	State:	Zip:	2	ma	00					
Project Location: N	NN Jamaria	>		Phone #:		Rale	no	1	1				
Sampler Name: 2	ussell be	TH	X	Fax #:		1	te	of e				()) - V-	
FOR LAB USE ONLY			MATRIX	PRESERV.	SAMPLING	1	No	No	y			,	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP # CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE: ICE / COOL OTHER:	DATE TI	Catan	NATA *	NO3	Densit				
	#-	-	-		10/3/12	7	1	1	<				
2	47	-	\		t	Ç	1	-	<				
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PLEASE NOTE: Liability and Damage analyses. All claims including those to service. In no event shall Cardinal be	PLEASE NOTE: Liability and Damagos, Cardinal's liability and client's exclusive remedy for any dialim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analytics. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be fisible for incidental or consequential dismages, including without flavings interruptions, loss of uses of profits incurred by client, its subaddivies.	any claim arisi deemed wake	ing whether based in contract the state of the contract that the state of the state	or tort, shall be limited to direceived by Cardinal wit loss of use, or loss of pro-	the amount paid by the hin 30 days after complets its incurred by client, its	client for the ation of the applicable subsidiaries.				-		-	L

Sampler - UPS - Bus - Other: Delivered By: (Circle One) Beceived By: Sample Condition
Cool Intact
Yes Pres CHECKED BY:

Relinquished By:

claim is based upon any of the above stated reasons to otherwise.

Phone Result:

Fax Result:

FaxResult: Bentley RE a poworld. Com

☐ Yes ☐ No Add'l Phone #: