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ANNUAL REPORTS

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ANNUAL CLASS III WELL REPORT

BASIC ENERGY SERVICES L.P.

BW - 002

API # 3002526884

EUNICE BRINE WELL # 001

June 30, 2016

DAVID ALVARADO

1

Payment of Discharge Plan Discharge Fees Pursuant to 20.6.2.3114 NMAC

Basic Energy Services LP has paid all known filing fees needed to pursue its Class III Brine well BW-002 Eunice Brine # 001. We still await the Permit. We have requested a check request for the permit fee of \$1,700.00 and was mailed to Water Quality management Fund in care of OCD at 1220 South St. Frances Drive in Santa Fe, New Mexico 87505 where a S. Martinez signed for it on 6/4/2014. As of June 30th 2016 we still have not received the permit.

Permit Expiration and Renewal

Pursuant to Regulation 20.6.2.510F NMAC Basic Energy Services LP permit will expire on November 8, 2018 renewal will be submitted no later than 120 days before expiration date.

Modification and Terminations

Basic Energy will notify the OCD Director and OCD's Environmental Bureau of facility expansions or Process modifications as per 20.6.23107C. No change in our solution mining has occurred from June 2015 to June 2016. The same amount of storage is still being used. Basic Energy has installed an integrated system to monitor security and actuation valves.

Transfer of Class III well Discharge Permit

Basic Energy Services L.P. Understands under 20.6.2.5101H NMAC Director will receive notice 30 days prior to the transfer date. The OCD Director may object prior to the proposed transfer date. OCD may require modifications to the discharge permit as a condition of transfer, and may require demonstration of adequate financial responsibility. The Permittee and the succeeding Permittee shall include an acknowledgement that the succeeding Permittee shall be responsible for compliance with the Class III well discharge permit upon taking possession of the facility. A specific date for transfers coverage of liability and information relation to the succeeding Permittee's financial as per20.6.2.5210B (17) NMAC

Compliance and Enforcement

Basic Energy Services L.P. will comply with any compliance order that requires immediately or within a specified time period and subject to penalty as per 74-6-10 NMSA 1978 also under 74-6-10.2 NMSA 1978

Falsifying, tampering, with or rendering inaccurate any monitoring devices or record required by a Discharge Permit issued pursuant to a state or federal law or regulation.

Quarterly Monitoring Requirements for Class III wells Basic Energy Services L.P. will comply with the Analysis of fluids. Please see attached water analysis. Basic Energy Services has changed chemical companies due to the uphill battle with the former WADCO Company with their personnel problems, they were released and Smart Chemical was brought on board in October of 2015. We are now on track with our chemical people and will provide the dated analyzed data sheet provided each month so as to give a more comprehensive comparison as we proceed with the mining of the Class III well. Please see below Figure: 1 Fresh and Brine History Comparison.

Eunice Brine Well BW-002 Fresh and Brine History Comparison Analysis October 2015 - June 2016

Fresh Water Tank										
Date	PH	Density	TD5	Chlorides mg/L	Sockum and/or Potentium					
10/29/2015	8.2	8.369	450	60	51					
12/2/2015	7.7	8.369	104,748	63,900	37,301					
1/6/2016	7.7	8.366	1,932	880	555					
1/27/2016	7.8	8.379	457	60	51					
2/25/2016	8.3	8.369	483	91	61					
3/31/2016	7.8	8.369	443	62	47					
5/2/2016	8.4	8.369	392	57	27					
6/6/2016	8	8,369	424	57	43					

		Brine at	Csg. Well Hee	d Valve	
Date	PH	Density	TD5	Chlorides mg/L	Sodium and/or Potassium
10/29/2015	7.1	9.868	316,468	190,331	116,722
12/2/2015	6.8	9.968	325,828	195,960	120,095
1/6/2016	7.5	9.326	188,530	113,600	69,735
1/27/2016	6.9	9.66	227,021	136,356	83,060
2/25/2016	7	10	321003	193,172	118,016
3/31/2016	6.6	9.948	323,188	194,540	118,617
5/2/2016	6.6	9.977	330,158	198,800	120,865
6/6/2016	6.6	9.994	306,674	184,649	111,695

Figure: 1 Fresh and Brine History Comparison

Please accept also the 2015 -2016 lab analysis on the fresh water and the Brine solution attached at the end of this report.

Solution Cavern Monitoring Program

Basic Energy Services L.P. has a program in place. Harcrow Survey out of Artesia will place a total of eight monuments for future monitoring. Please see the attached and proposal sent to NM OCD on August 29th s 2013 by Permit West. We will do our survey in July or August of 2016 depending on availability of the surveying group and place bench marks as planned. We still await response from OCD on the plan for any added ideas. Constructors Survey never came but we will follow the same proposal of August 29th 2013.

Solution Cavern Characterization Program

Basic Energy L.P. is looking into different geophysical methods to give a good and reliable account of size and shape of BW-002 Eunice Brine. I have been pushing for Magneto Telluric survey or some kind of electrical resistivity. Because of the down turn of our industry the proposal is still being held under consideration. Sonar might be the alternative. We will notify OCD within 180 days of Permit once it is in. Due to the loss of records prior to 2009 Basic Energy has keep an accurate count of produced brine and fresh water injected and has turned in such totals for each month and will continue to send monthly totals of injected fresh water and extracted brine water.

Form July 2015 until 30th of June 2016 a total of 216,759 Bbl. of Brine was produced in this time period. Please see *Figure: 2* totals recorded. I have included the full sheet for review at the end of this report please accept it for record.

Depicted below is the amount of material used to produce the 216,759 bbl. of brine from July 2015 to June 30th of 2016 for your review.

(216,735 bbl. of Brine) (125.41 lbs / bbl.) = 27,180,736.35 lbs of Salado formation was used = 543,615 Cu Ft. or 20,133.88 cubic yards that has been mined out of marker bed 9 from July 2015-June 30th 2016

With the industry in a down turn drilling has slowed almost to a halt we hope that the market stabilizes by the last quarter of this fiscal year and drilling starts.



Figure: 2 Totals of Brine and Fresh water July 2015-June 30th 2016

Annual Certification

Basic Energy Services L.P. has reviewed the BW-002 CBL and shows good continuity between the outer most casing and the bore hole wall. A 5 $\frac{1}{2}$ liner was run to the shoe of the $\frac{8}{5}$ and cemented in place to surface assuring that the Rustler and upper water is protected.

Basic Energy Services L.P. placement of the mining area is in marker bed 9 and is continuing to mine in this Halite bed by water induction thru inter most tubular and extracting thru the $5 \frac{1}{2}$ " liner. BW-002 is monitored and operates with 250 psi at surface down the tubing. Please see the attached well C-103 subsequence report of work done to well bore, C-105 and the well bore diagram at the end of this report.

Contingency Plans

Basic Energy Services L.P. has implemented an integrated system that monitors levels within the storage vessels by using GWR (guided wire radar) system and Sonar guided with in the fresh water tanks. This system will shut down the pump if levels that are set hit critical. They send an alarm via satellite and received by telephone. The operation will then be looked at and once all systems are clear operations will reset computer back in operation. Unloading pads were placed where Brine is sold with actuation valves are opened once a security number is activated at the systems PLC. Flow meters were not installed on the sales line all brine water sold is recorded by driver at the PLC with an access code number and a ticket is filled out. This allows the party buying the Brine to inter the exact amount of barrels to be bought this will minimize human failure from occurring while loading. The facility has a berm around the tanks and lined with a 20 mil liner it will contain 110% of total fluid stored at the facility. -Also the location has a berm to secure any failure. Please see the attached automation isotope that is in operation, included at the end of this report.

Closure

Pursuant to 20.6.2.5209 NMAC Basic Energy Services L.P. will submit for OCD's approval a closure plan, a completed form C-103 for plugging and abandonment of the Class III well. Basic Energy Services L.P. will submit a Pre- closure notification to OCD Environmental Bureau 30 days prior to the date that it proposed to close or to discontinue operation of its Class III well as pursuant 20.6.2.5005B NMAC and await the OCD's Environmental Bureau approval of all well activities before implementing its proposed closure Plan. Basic Energy Services L.P. will proved the Environmental Bureau with the Name of the facility, Address of facility, name of the Permittee, Address of the Permittee, Contact person, Phone number, Well number, Type of well, Year of the well construction, Well construction details, Type of discharge, Average flow per day in gallons, closure activities of fluid samples, sediments, appropriate disposal of remaining fluids/sediments, soil contaminated clean up, installation of plugs, ground water and vadose zone, Proposed date of well closure, Name of Preparer and date.

Plugging and Abandonment Plans

Pursuant to 20.6.2.5209A NMAC Basic Energy Services L.P. will submit to OCD a plugging and abandonment plan that meets the requirements of 20.6.2.3109C

NMAC, 20.6.2.5101C NMAC and 20.6.2.5005 NMAC, for protection of ground water. Basic Energy Services L.P. will comply with 20.6.2.5209 NMAC and understands if requested by OCD Basic Energy Services shall submit for approval prior to closure a revised or updated plugging and abandonment plan also the obligation to implement the plugging and abandonment plan as well as the requirements of the plan survives the termination or expiration of this Discharge Permit.

Record Keeping

Basic Energy Services L.P. has maintained its records of all inspection, Surveys, investigations, etc. and will keep them at hand for five years at the Artesia NM office for OCD inspection review.

Release Reporting

Basic Energy Services L.P. will report unauthorized releases of water contaminants in accordance with any additional commitments made in its approved Contingency Plan that may exceed the standard specified at 20.6.2.3103 NMAC then the OCD's Environmental Bureau will be notified with a report no release has occurred during July 2015 thru June 30th 2016.

Oral Notifications

Basic Energy Services L.P. will notify the OCD's Environmental Bureau and provide them with the name, address, and telephone number of the person in charge of the facility, and the owner of the facility including the name and location, date, time, and the duration of the discharge.

The source and cause of the discharge, description of the discharge, including its chemical composition, with the estimated volume of the discharge and any corrective or abatement action taken to mitigate immediate damage from the discharge will be provided to the OCD Environmental Bureau.

Written Notification

Basic Energy Services will send written notice on form C-141with all attachments within one week of a discharge to OCD's Environmental Bureau verifying prior oral notification.

Other Requirements

Basic Energy Services L.P. welcomes any authorized OCD representative and will assist with any needed information or help in data gathering as pursuant to Section 74-6-9 NMSA 1978. Hobbs OCD District II will be given 65 days' notice if any environmental sampling to be performed pursuant to the Discharge Permit including plugging, abandonment or decommissioning of any equipment associated with Basic Energy Services L.P. BW-002 Class III well. Per 20.6.2.3107B environmental sampling and sent off for analytical laboratory data will be done by an accredited National Environmental Laboratory Accreditation Conference (NELAC) Laboratory. The Permittee shall submit data summary tables, all raw analytical data and Laboratory QA/QC.

Bonding or Financial Assurance

Pursuant to 20.6.2.5210B (17) NMAC Basic Energy Services L.P. has in place all bonding for the BW-002 Discharge Permit and documented in OCD file. Please see attachment Blanket Plugging Bond # RLB0011488 And Surface Improvement damage Mega Bond # RLB0012472

2016 Summary of Class III BW-002

2015 the market stated stable until March where the Eunice BW – 002 experienced the downward loss of sales from an est. average of 43,000 bbl. per month to est. 22,000 bbl. a month. A 50% turn by the end of the year. In 2016 things had worsened est. start of January below 20,000 bpm to end June seeing 5,148 bpm. The total brine in solution produced from July 2015 thru June 2016 was record at 216,735 bbl. Total Fresh water from the City of Eunice is still being used and totaled 217,246 bbl. for the period from July 2015 thru June 30th 2016.

Brine sales during the period from July 2015 thru June 30th 2016 generated \$314,256.25 of third party revenue this is excluding 4000 bbl. in storage. With the increase of drilling in the South Eastern part of the State also came with the increase of trucking at the beginning of 2015 falling drastically by the end of March 2015. Basic Energy Services trucking yards utilized the intercompany use of the brine station. Inner Company revenue total during this period was \$6,173.34. The revenue stated above respectively represents third party sales billed out of our yard. Eunice Brine BW-002 totaled \$320,429.59 for both IC and third party sales.

Basic Energy Services L.P. only allowed new customers with good credit standing to purchase Brine at the BW-002. In 2013 we had 40 customers and due to the down turn in 2014 a total of 31 were allowed to purchase brine. Continuance of screening out customers Basic Energy Services has as of June 30th 2016 has a total of 8 customers two that are on credit hold until payment is cleared.

Request to have security and automation installed was in the works. An isotope plan was sent to Jim Griswold and BES PBU VP Wigington for build of an integrated system with loading pads and security cameras. It was approved and finished. This system is working very well we can track each customer's data and filter data for almost any request including disconnect of those that fail to abide to our payment agreements.

A meeting at District II with Jim Griswold was conducted and the new Discharge plan was to be set in place. During the meeting placing Monuments around the well location Basic Energy Services L.P. moved quickly and placed an order with Construction Surveying Services form Alamogordo, NM 88311. Unfortunately they failed to commit due to work load and never notified. Basic Energy Services has asked Harcrow Surveying out of Artesia to execute our plan and we hope to have it done by August 2016.

A plan was executed on August 29th 2013 of a Vertical Control Monument Installation in Cardinal directions from the well head.

- 1. Two Monuments east and west at a distance of 75 feet from the well.
- 2. Two Monuments north and south at a distance of 150 feet from the well.
- Two Monuments east and west at a distance of 300 feet from the well.
- 4. Two Monuments north and south 600 feet from the well.

All information of the plan is attached with this report for approval yet we have not heard back from OCD we have executed the plan and will have it in place by August 2016.

Monthly Fluid Injection and Brine Production

Please see attachment with this report for totals on each year also the separate data sheet from July 2015 thru June 30th of 2016. The operating pressure recorded with the field gauge installed at the well head is constant at 240 PSI.

When the Pump is not running a static constant pressure on tubing is 140 PSI.

The total brine produced from July 2015 was 156,735 bbl. with 4000 bbl. in storage. In 2016 from January until June 301th a total of 60,024 bbl. of brine was produced. Fresh water from the City of Eunice is still being used and totaled for the reporting period from July 2015 to December 31st was 155,406 bbl. Total fresh water used from January thru June 30th 2016 was 61,840 bbl.

Water Analysis on Brine and Fresh Water

Water Analyzes on Brine and Fresh Water was a failure for 2015 WADCO continued to have personnel problems and were released. Smart Chemical was placed in action to handle our needs and started in October of 2015. Please see the attached Analysis for your review at the end of this report.

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Formation MIT
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Five year MIT was done in 2013 and pasted. BW-002 had remedial work done to it where a 5 1/2 liner was placed and cemented to surface. I spoke with Mark Whitaker District II receiving approval to MIT the new Casing and we did and it passed please see our C-103 and C-105 on the work done attached to the end of this report. Basic Energy has tested the formation on 6/30/16 for 4 hours at 200 psi and shows good integrity BW-002. It took 448 bbl. to load and maintained 200 PSI for 4 hours as due diligence to keep a closer account of data until OCD MIT Formation date is re-scheduled for the BW-00. Please accept our field in house testing as data for your records also a copy of the OCD required 6/30/16 test chart. Basic Energy Services L.P. will continue conducting in field test and will notify OCD before conducting future testing and invite OCD Officer to witness our testing in the future.

This was one of the topics discussed during the meeting that was held at the District II in being proactive in ground water protection.

Deviations of Operations

No production deviations have occurred in 2014 at the BW-002 Brine well. We are injecting down our most inner tubular that being 2 7/8 plastic coded J-55 and extracting up our 5.5 casing to our production tanks. A flow meter is installed downstream for the well before the 10# brine water is stored in the facilities 4- 1000 bbl. tanks.

Leaks and Spills

No leaks or spills occurred during July 2015 thru June 30th 2016.

AOR Review of BW-002

No activity has been shown in the area. I have attached an aerial picture of the area from Drilling Info. And no new wells or pipe lines have been noted. Please see the areal of the BW-002 Area at the end of this report. *Figure: 3* Aerial showing no drilling nor pipe lines.

Eunice Well BM-002

Aerial showing no dolling our Pipe Linus In the AGI



Figure: 3 Aerial BW-002

Summary of Surveys

Basic Energy Services L.P. is still looking in on what the best practice will be for gathering data needed to have a good account of the size and shape of the well bore. The past has shown that the Sonar Survey did not depict a true assessment. Literature read from the survey done on the I&W Brine well in Carlsbad. It showed a closer depiction as to the size and width of the mine well. I feel that the Magneto Telluric Survey by DMT Technology needs to be looked at closely or some other type of electric resistivity survey might be used.

The setting of the eight Monuments by our surveyors will allow us to see if any deviation as occurred. I await their report and will file it to Jim Griswold as soon as 1 get the report. Please find the plan in place attached with this report.

Water Ratio Injected to Produced Brine

A total of 216,759 bbl. of brine was produced in the period from July2015 thru June 30th 2016 and a total of fresh water was 217,246 bbl. that was recorded during July 2015 thru June 30th 2016. Our field Tech is still having some problems with the fresh water meter due to the City working on the areas upgraded City lines.

Facility Activity and events

The increase of sales showed a demand for our 10# Quality Brine and is attributed to the increase of drilling in the SENM area until March of 2015 with the down turn of the industry drilling has halted but we hope to come out of this down turn buy the last quarter of 2016. Recommendations were made to automate the facility and integrate the system with alarms and stop and open actuation valves allowing the system to fill the Fresh water tanks and closing at a set height. The demand for pump operation is being controlled with the GWR set in the Storage tanks opening the actuation valve and allowing the pump to start injecting water down tubular. This was passed and the approval was given it is in operation and is working well. Security codes were also give to our customers and will not allow any unauthorized visitors to access the system. With this better lighting was installed and security cameras overlook the facility. We look forward to 2017 once the down turn levels off and drilling is back to gaining momentum allowing the once cash customers back into our facility.

Certification

Basic Energy services LP (Owner / Operator) by the Officer, whose signature appears, below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained here. Basic Energy Services L.P. will continue to monitor all placed guides lines to insure a safe and environmental operation to the public and its surrounding. Basic Energy Services LP further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, Safety and the environment, change the conditions and requirements of this permit administratively. **Conditions** Accepted By:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my information those individuals immediately responsible for obtaining the information, I believe that the information in true accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

> **Basic Energy Services LP** Company Name - Print name above

> > David H. Alvarado Company Representative – print name

Company Representative Signature

Title: New Mexico Fluid Sales Manager

Date: 6/30/16

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		BES							TOWNSHI		
Le	ase	Asset #	A	7	FOO	TAGE	UNIT	SEC	P	RANGE	County
Eunice	Brine #1	18476	30-025-	-26884	630 FSL	2427 FEL	0	34	215	37E	LEA
BES			Brine	400	Max PSI		Fresh		Well M	onthly capabil	ity 81,840 bbl.
Month	Start	End	Total	PSI	F/W Start	F/W End	Total	% F/w to Brine	Year throu	ghput capabili	ity 982,080 Bbl.
Jan	113,852	6,730	19,185	250	114,955	5,800	18,947	Reset Brine e	ended 126307 1/2	2 Reset Fresh meter	ended 128102 1/22
Feb	0	13,170	13,170	250	0	14,123	14,123				
Mar	13,170	20,480	7,310	250	14,123	21,809	7,686				
Apr	20,480	30,109	9,629	250	21,809	31,795	9,986				
May	30,109	35,691	5,582	250	31,795	37,588	5,793				
Jun	0	5,148	5,148	250	0	5,305	5,305	Teste	d formation f	or 4 hours 6/3	0/16 Good
July			0				0				
August			0				0				
Sep			0				0	0.			
Oct			0				0	2			
Nov			0				0				
Dec			0				0				
Year total	2016		60,024				61,840				

		BES							TOWNSHI		
Le	ase	Asset #	AP	1	FOO	TAGE	UNIT	SEC	P	RANGE	County
Eunice	Brine #1	18476	30-025-	26884	630 FSL	2427 FEL	0	34	215	37E	LEA
BES			Brine	400	Max PSI		Fresh		Well M	onthly capabil	ity 81,840 bbl.
Month	Start	End	Total	PSI	F/W Start	F/W End	Total	% F/w to Brine			
Jan	299,000	342,769	43,769	250	296,000	339,782	43,782		Year throu	ghput capabili	ty 982,080 Bbl.
Feb	0	32,350	32,350	250	0	32,380	32,380	Reset 1-31-15			
Mar	32,350	73,144	40,794	250	32,380	73,501	41,121				
Apr	0	28,208	28,208	250	0	21,563	21,563	Reset meters	April 1st		
May Jun July August Sep	28,208 19,012 56,621 0 18,388	19,012 56,621 99,504 18,388 45,251	27,115 37,609 42,883 18,388 26,863	250 250 250 250 250	21,563 17,881 57,236 0 18,885	17,881 57,236 97,687 18,885 45,855	28,173 39,355 40,451 18,885 26,970	f/w 31855 13th Tested Reset meter	b/w 36311 Formation 19	th 225 psi four	hours Good
Oct	45,251	69,321	24,070	250	45,855	70,064	24,209				
Nov	69,321	91,503	22,182	250	70,064	92,416	22,352				
Dec	91,503	113,852	22,349	250	92,416	114,955	22,539				
Year total	2015		366,580				361,780				

Lea	se	BES Asset #	API		FOOT	TAGE	UNIT	SEC	TOWNSHIP	RANGE	County
Eunice B	Irine #1	18476	30-025-26	884	630 FSL	2427 FEL	0	34	215	37E	LEA
BES			Brine	400	Max PSI		Fresh		Well Mo	nthly capabil	ity 81,840 bbl.
Month	Start	End	Total	PSI	F/W Start	F/W End	Total	% F/w to Brine			
Jan	300,781	312,258	11,477		309,492	321,206	11,714		Year through	hput capabili	ty 982,080 Bbl.
Feb	0	14,943	14,943	250	0	14,392	14,392	Shut down F	eb 15th for building	of integration sys	tem / Loading pads
Mar	0	10,624	10,624	250	0	10,624	10,624	Started produc	ing on 3/28/14 wai	ting for PLC from	ICS for Scada terminal
Apr	10,626	32,789	22,163	250	10,624	32,307	21,683	Fully Au	utomated 4/10	/14	
May	32,789	55,589	22,800	250	32,307	54,935	22,628	Four hour f	formation test	5/5/28/14 h	eld 210 psi good
Jun	55,589	85,413	29,824	250	54,935	83,277	28,342	10.52			
July	0	21,420	21,420	250	0	21,406	21,406				
August	21,420	69,803	48,383	250	21,406	68,704	47,298				
Sep	69,803	110,399	40,596	250	68,704	108,593	39,889				
Oct	110,399	177,016	66,617	250	108,593	174,479	65,886				
Nov	177,016	243,700	66,684	250	174,479	240,824	66,345				
Dec	243,700	299,000	55,300	250	240,824	296,000	55,176				
Year total			410,831				405,383				

Eunice Brine BW-2 2014 Month to Year totals

Totals for 2013 Eunice Brine #1 BW-02

L	ease	BES Asset #	AP	4	FOO	TAGE	UNIT	SEC	TOWNSHIP	RANGE	County
Eunice	Brine #1	18476	30-025-	26884	630 FSL	2427 FEL	0	34	215	37E	LEA
BES			Brine	400	Max PSI		Fresh		and the second	als and the	
Month	Start	End	Total	PSI	F/W Start	F/W End	Total	% F/w to Brine			
Jan	0	16575	16575	250	0	16025	16,025			No USTER	States and
Feb	0	22037	22037	250	0	21834	21,834				
Mar	0	35052	35052	250	0	36157	36,157	96.9			
Apr	0	19564	19564	250	0	20121	20,121	97.2			
May	19564	39617	20053	250	20121	40691	20,570	99.7			
Jun	39617	68761	29,144	250	40691	70375	29,684	98.2			
July	68761	105190	36,429	250	70375	107615	37,240	97.8			
August	105190	156374	51,184	250	107615	159990	52,375	97.7			
Sep	156374	193450	37,076	250	159990	197968	37,978	97.6			
Oct	193450	233708	40,250	250	197968	240048	42080	95.7			
Nov	233708	266685	32,977	250	240048	274154	34,106	96.7			
Dec	266685	300781	34,096	250	274154	309492	35,338	96.5			

Year total

374,437 38.1% Utilization for 2013

Well Monthly capability 81,840 bbl.

Capability Year throughput 982,080 Bbl.

2006	BBLS	2007	BBLS	2008	BBLS	2009	BBLS
DEC	16465	DEC	2600	DEC	23963	DEC	4320
NOV	5550	NOV	1080	NOV	24316	NOV	9316
OCT	3580	OCT	30	OCT	29282	OCT	9872
SEP	5490	SEP	1908	SEP	5600	SEP	13203
AUG	9590	AUG	12664	AUG	DOWN	AUG	5575
JUL	NO RECORD	JUL	15430	JUL	DOWN	JUL	10143
JUN	NO RECORD	JUN	15278	JUN	DOWN	JUN	10840
MAY	NO RECORD	MAY	11365	MAY	721	MAY	3308
APR	NO RECORD	APR	10968	APR	2215	APR	13180
MAR	NO RECORD	MAR	4276	MAR	DOWN	MAR	7735
FEB	NO RECORD	FEB	9341	FEB	5986	FEB	10055
JAN	NO RECORD	JAN	23133	JAN	10032	JAN	2923
	40675		108073		102115		100470

				Metered	Metered		Metered	Metered
2010	Brine BBLS	Fresh H2O	2011	Brine BBLS	Fresh H2O	2012	Brine BBLS	Fresh H2O
DEC			DEC	2,803	2,759	DEC	26,217	25,961
NOV			NOV	10,104	11,154	NOV	19,345	19,100
OCT			OCT	20,363	22,827	OCT	11,572	13,144
SEP	Shut in	Shut in	SEP	18,479	14,930	SEP	18,479	14,930
AUG	Shut in	Shut in	AUG	8,446	8305	AUG	11,076	11787
JUL	1790		JUL	12,591	10,514	JUL	16,878	16,847
JUN	5740		JUN	12,124	11,344	JUN	15,939	15,344
MAY	18508	4390	MAY	12,984	11,997	MAY	11,742	12,053
APR	10840	3801	APR	10,067	9,153	APR	14,340	15,186
MAR	9111	3856	MAR	6,431	5,763	MAR	10,165	10,084
FEB	8546	5328	FEB	11,501	10,247	FEB	10,713	10,641
JAN	25225	11262	JAN	1,740	1,740	JAN	6,229	6,162
	42882			127,633	120,733		172,695	171,239



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Martin Water Laboratories, Inc.

Analysts & Consultants since 1953 Bacterial & Chemical Analysis

	Jerry woodward		U	BORATORY NO.	13-10-334	
ADDRESS:	2810 Savoy Place, M	idland, TX 7970)5 s/	MPLE RECEIVED:	10/27/15	
COMPANY:	Smart Chemical		R	SULTS REPORTED:	10/29/15	
LEASE:	(Basic Energy)		c	OUNTY, STATE:		
FORMATION:			FI	ELD OR POOL		
		DESC	RIPTION OF SA	MPLES		
No. 1	Submitted water samp	ole - taken 10/27	/15 from Euni	ce Brine # 1 at	Wellhead.	
No. 2	Submitted water samp	le - taken 10/27	/15 from Euni	ce Brine # 1 at	Fresh Water Tank	Le .
No. 3						
No. 4				1		
chemical and Pl	hysical Properties (milligrams	per liter)	No. 1	No. 2	No. 3	No. 4
pecific Gravity	• 50°F. 91	268 165/9al	1.1825	1.0028	8.369	165/921
H When Sampl	led					
H When Receiv	red		7.1	8.2		
licarbonate as H	HCO3		195	181		
otal Hardness,	as CaC03		19,000	208		
alcium, as Ca			1,400	67		
Magnesium, as I	Mg		3,767	10		
iodium and/or f	Potassium		116,722	51		
ultate, as SO4			4,053	82		
hloride, as Cl			190,331	60		
ron, as Fe			6.2	0.15		-
sarium, as sa			0	0		
otal Dissolved S	Solids, Calculated		316,468	450		
ashen Dinuida	Coloriated		25	2		
arbon Diomoe,	Calculated		25	د		
ydrogen Sulfide	e		0.0	0.0		
esistivity, ohms	s/m @ 77°F.		0.044	17.300		
orrosiveness	College Transformer		Moderate	Mild		
anum sunate s	stanty rendency		None	None		
alchum Carbona	ate S.I. @ 17 7. [Still-DeVis]"		1.90	0.82		
alcium Carbona	Scaling Tenderry	-	J.UI	1.30		
and and a second a	around remember		Moderate	None		and the second s
			7.2	1.0		
Manganese						
vanganese						

(432) 683-4521 • 709 W. Indiana, Midland, Texas 79701 • (fax) 682-8819 Remit to Address: P.O. Box 98, Midland, Texas 79702



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Martin Water Laboratories, Inc.

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TO:	Jerry Woodward		LABORATORY NO.	15-11-327	
ADDRESS:	2810 Savoy Place, Midland, T.	X 79705	SAMPLE RECEIVED:	11/30/15	
COMPANY:	Smart Chemical		RESULTS REPORTED:	12/2/15	
LEASE:	(Basic Energy)		COUNTY, STATE:	Lea, NM	
FORMATION:			FIELD OR POOL:		۵۵٬۰۰۹ میلی (۱۹۹۵ میلی) (۱۹۹۵ میلی) میلید که ۲۰۰۰ میلی) (۱۹۹۵ میلید ۲۰۰۰ میلی) (۱۹۹۵ میلید) (۱۹۹۵ میلید) (۱۹۹۵
	and the second sec	DESCRIPTION O	F SAMPLES		
No. 1	Submitted water sample - take	n 11/30/15 from I	Eunice Brine #1 @	wellhead.	
No. 2	Submitted water sample - take	n 11/30/15 from E	Eunice Brine #1 @	fresh water tank.	
No. 3					
No. 4					
Chemical and	Physical Properties (milligrams per liter)	No. 1	No. 2	No. 3	No. 4
Specific Grav	vity @ 60°F. 9. 9	48 lbs 1.194	15 1.002	8 8,369	165/921
pH When Re	ceived	6.8	30 7.7	0	*** The Table To Control (2000)
Bicarbonate	as HCO ₃	14	43	9	
Total Harda	err ar (a(0)]	10.90	0.00	0	
Calcium as	Ca	17,00	50 9,80	0	
Magnesium.	as Mg	3.95	1.89	5	
Sodium and	/or Potassium	120.09	37.30	1	
Sulfate, as S	04	4.28	41	2	a an anticipation dat gradient
Chloride, as	Cl	195,96	63,90	0	vijet angestigenerer
Iron, as Fe			6	4	
Barium, as B	8		0	0	
Total Dissolv	red Solids, Calculated	325.82	104,74	8	
an a r an addition	······································				a generations
Hydrogen Su	lifide	0.0	0.0	0	
Resistivity, o	hms/m @ 77°F.	0.04	0.09	1	alalaa noo ana ana ana ana ana ana ana
Manganese		2.44	8 0.00	8	
		÷	11		
-			an a		
and endined one a gase					

REMARKS: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

By: Greg Ogden, B.S.

(432) 683-4521 * 709 W. Indiana, Midland, Texas 79701 * (fax) 682-8819 Remit to Address: P.O. Box 98, Midland, Texas 79702 Email: martinwaterlabs@nts-online.net



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Martin Water Laboratories, Inc.

Analysts & Consultants since 1953 Bacterial & Chemical Analysis

2810 Savoy Place, Midland, TX	79705 SA	MPLE RECEIVED:	1/5/16	
Smart Chemical	RE	SULTS REPORTED:	1/6/16	
(Baxic Energy Services) Eunice	Brine # 1 co	UNTY, STATE:	Lea, NM	
	FIE	LD OR POOL:		
	DESCRIPTION OF SAM	MPLES		
Submitted water sample - taken	1/4/16 from Fresh.			
Submitted water sample - taken	1/4/16 from Wellhea	ad.		
	and a second			
Physical Properties (milligrams per liter)	No.1	No. 2	No. 3	No. 4
ity @ 60°F. 8,366 16	19a1 1.0025	1.1175	9133 165/901	
bavie	7.70	7.50		
as HCO _a	220	205		
	270	10 900		
a cocus	96	1,000		
as Mg	32	2.017		
or Potassium	555	69,735		
14	149	1,973		and the second
1	880	113,600		
	27	29		
	0	0		
the second se				
od Solids Calculated	1 037	188 530		
	1,734	100,000		
	Valenteen, work			
fide	0.00	0.00		
ims/m @ 77°F.	3.042	0.060		
and all a construction of the second s	.073	3.484		
		, the last have been as		
				allele a description
an ann an				
-				
	2810 Savoy Place, Midland, TX Smart Chemical (Baxic Energy Services) Eunice Submitted water sample - taken Submitted water sample - taken 'hysical Properties (milligrams per liter) ty @ 60°F. 81.344 142 eived is HCO3 a ss Mg or Potassium 4 1 d Solids, Calculated fide ims/m @ 77°F.	2810 Savoy Place, Midland, TX 79705 SA Smart Chemical RE (Baxic Energy Services) Eunice Brine # 1 CO FIE DESCRIPTION OF SAF Submitted water sample - taken 1/4/16 from Fresh. Submitted water sample - taken 1/4/16 from Wellhest thysical Properties (milligrams per liter) No. 1 ty @ 60°F. 8: 3/6/6 1/6/9/4 1.0025 eived 370 a a a Sa CaCO3 370 a a a a BS Mg Submitted a 1932 a Submitted water sample - taken 1/4/16 from Wellhest bitter) No. 1 bitter) Bitter) Bitter) Bitter) <td>2810 Savoy Place, Midland, TX 79705 SAMPLE RECEIVED: Smart Chemical RESULTS REPORTED: (Baxic Energy Services) Eunice Brine # 1 COUNTY, STATE: (Baxic Energy Services) Eunice Brine # 1 COUNTY, STATE: Submitted water sample - taken 1/4/16 from Fresh. Submitted water sample - taken 1/4/16 from Wellhead. No. 1 No. 2 No. 1 No. 1 No. 2 No. 1 No. 1 No. 1 No. 1 No. 2 IIITS IIIIS No. 1 No. 1 No. 1 No. 1 No. 1 IIIIS Sign colspan="2">Sign colspan="2">Sign colspan="2">Sign colspan="2">Sign colspan="2"Sign colspan= 2"Sign colspan="2"Sign colspan="2"Sign colspan="2"S</td> <td>2810 Savoy Place, Midland, TX 79705 SAMPLE RECEIVED: 1/5/16 Smart Chemical RESUTS REPORTED: 1/6/16 (Baxic Energy Services) Eunice Brine # 1 OUNTY, STATE: Lea, NM FIELD OR POOL: DESCRIPTION OF SAMPLES Submitted water sample - taken 1/4/16 from Fresh. Submitted water sample - taken 1/4/16 from Wellhead. No. 1 No. 2 Mysical Properties (milligrams per liter) No. 2 No. 3 tived 7.70 7.50 is 3/2/2 Boot Sample - taken 1/4/16 from Wellhead. No. 1 No. 2 No. 2 No. 2 No. 3 Submitted water sample - taken 1/4/16 from Wellhead. No. 2 No. 3 No. 1 Intro of 7.50 Submitted mater sample - taken 1/4/16 from Vellhead. Intro of 7.70 Submitted mater sample - taken 1/4/16 from Vellhead. Introta sample - taken 1/4/16 from Vellhead.</td>	2810 Savoy Place, Midland, TX 79705 SAMPLE RECEIVED: Smart Chemical RESULTS REPORTED: (Baxic Energy Services) Eunice Brine # 1 COUNTY, STATE: (Baxic Energy Services) Eunice Brine # 1 COUNTY, STATE: Submitted water sample - taken 1/4/16 from Fresh. Submitted water sample - taken 1/4/16 from Wellhead. No. 1 No. 2 No. 1 No. 1 No. 2 No. 1 No. 1 No. 1 No. 1 No. 2 IIITS IIIIS No. 1 No. 1 No. 1 No. 1 No. 1 IIIIS Sign colspan="2">Sign colspan="2">Sign colspan="2">Sign colspan="2">Sign colspan="2"Sign colspan= 2"Sign colspan="2"Sign colspan="2"Sign colspan="2"S	2810 Savoy Place, Midland, TX 79705 SAMPLE RECEIVED: 1/5/16 Smart Chemical RESUTS REPORTED: 1/6/16 (Baxic Energy Services) Eunice Brine # 1 OUNTY, STATE: Lea, NM FIELD OR POOL: DESCRIPTION OF SAMPLES Submitted water sample - taken 1/4/16 from Fresh. Submitted water sample - taken 1/4/16 from Wellhead. No. 1 No. 2 Mysical Properties (milligrams per liter) No. 2 No. 3 tived 7.70 7.50 is 3/2/2 Boot Sample - taken 1/4/16 from Wellhead. No. 1 No. 2 No. 2 No. 2 No. 3 Submitted water sample - taken 1/4/16 from Wellhead. No. 2 No. 3 No. 1 Intro of 7.50 Submitted mater sample - taken 1/4/16 from Vellhead. Intro of 7.70 Submitted mater sample - taken 1/4/16 from Vellhead. Introta sample - taken 1/4/16 from Vellhead.

REMARKS: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

By: Greg Ogden, B.S.

(432) 683-4521 * 709 W. Indiana, Midland, Texas 79701 * (fax) 682-8819

Remit to Address: P.O. Box 98, Midland, Texas 79702



(III)

Martin Water Laboratories, Inc.

Analysts & Consultants since 1953 Bacterial & Chemical Analysis

TO:	Jerry Woodward	1	ABORATORY NO.	16-01-328				
ADDRESS:	4008 N. Grimes, #189, Hobbs,	NM 88240 :	AMPLE RECEIVED:	1/26/16				
COMPANY:	Smart Chemical	1	RESULTS REPORTED:	1/27/16				
FASE:	(Basic Energy Services) Eunio	e Brine # 1	OUNTY. STATE:	Lea, NM				
CORMATION.	(control minility)	1	1008 9001					
FORMATION.		DESCRIPTION OF S	ALADI EE					
No.1	Submitted water cample - take	DESCRIPTION OF SI	Water Tenk					
NO. 1	Submitted water sample - taker	1 1/20/10 from Well	Head					
No.2	Sublittice water sample - taken	1 1/20/10 11011 11011	ncau.	dan de manuel de la composition de la c				
No.4								
Chemical and	Physical Properties (milligrams per liter)	No.1	No. 2	No.3 No.4				
Specific Gravit	10 60°F. R. 379 165	lag1 1.0040	1,1575	9,62 165/901				
pH When Sam	pled	79001		Inera interior				
pH When Rece	lived	7.8	6.9					
Bicarbonate as	HCO	185	122	2				
Total Hardness	i, as CaCO3	212	15,200					
Calcium, as Ca		70	1,320					
Magnesium, as	s Mg	9	2,892	2				
Sodium and/or	/ Potassium	51	83,060)				
Sulfate, as SO4	1	82	3,271					
Chioride, as Cl		60	136,356	5				
Iron, as Fe		8.4	70					
Barium, as Ba		0	0					
Total Dissolved	I Solids, Calculated	457	227,021					
Carbon Dioxide	e, Calculated	5	26	5				
Hydrogen Sulfi	de	0.0	0.0					
Resistivity, ohn	ns/m @ 77°F.	17.200	0.052	2				
Corrosiveness		Mild	Mod-Severe					
Barium Sulfate	Scaling Tendency	None	None					
Calcium Carbo	nate S.I. @ 77° F. (Stiff-Davis)"	0.45	0.14					
Calcium Carbonate S.I. @ 122" F. (Stiff-Davis)"		0.93	0.94					
Calcium Sullat	e Scaling Tendency	None	None					
Manganese , a	s Mn	0.100	4.085	5				

REMARKS: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

By: Greg Ogden, B.S.

(432) 683-4521 * 709 W. Indiana, Midland, Texas 79701 * (fax) 682-8819 Remit to Address: P.O. Box 98, Midland, Texas 79702 PT - . 19

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Martin Water Laboratories, Inc.

Analysts & Consultants since 1953 **Bacterial & Chemical Analysis**

TO:	Jerry Woodward	U	ABORATORY NO.	16-02-324 2/23/16 2/25/16				
ADDRESS:	2810 Savoy Place, Midland, TX	79705 s	AMPLE RECEIVED:					
COMPANY:	Smart Chemical	R	ESULTS REPORTED:					
LEASE:	(Basic Energy Services)	0	OUNTY. STATE:					
FORMATION		FI	FLD OR POOL					
- Champerion.		DESCRIPTION OF SA	MOIES					
No.1	Submitted water sample - taken	2/23/16 from Eunic	e Brine #1 SWI	D fresh water ta	nk.			
No. 2	Submitted water sample - taken	2/23/16 from Eunic	e Brine #1 SWI	D - wellhead.				
No. 3		the second s			а околонием жило, традорут Аколас и Баллени			
No. 4				ale en establishingen versikligtet mer van geographie verd versigen geographie – een een een een een				
Chemical and I	Physical Properties (milligrams per liter)	No. 1	No. 2	No. 3	No. 4			
Specific Gravity	10 60°F. 8.369 165	leal 1.0028	1.1985	10.00	1bs Gal			
pH When Samp	pled							
pH When Rece	ived	8.3	7.0		-			
Bicarbonate as	HCO3	185	159					
Total Hardness	, as CaC03	216	20,200					
Calcium, as Ca	An and an	72	1,680		part of the state of the second state of the s			
Magnesium, as	Mg	9	3,888					
Sodium and/or	Potassium	61	118,016					
Sulfate, as SO4		65	4,089					
Chloride, as Cl		91	193,172	72				
Iron, as Fe		0.15	26					
Barium, as Ba		0	0	-				
Total Dissolved	Solids, Calculated	483	321,003		and a second sec			
Carbon Dioxide	, Calculated	3	25					
Hydrogen Sulfi	de	0.0	0.0					
Resistivity, ohn	u/m @ 77"F.	15.700	0.044					
Corrosiveness		Mild	Mild					
Barlum Sulfate	Scaling Tendency	None	None					
Calcium Carbon	nate S.I. @ 77* F. (Stiff-Davis)*	0.96	1.90	.90				
Celcium Carbonate S.I. @ 122° F. (Stiff-Davis)*		1.44	2.90					
Calcium Sulfati	e Scaling Tendency	None	None					
Manganese		0.067	4.600	a for each of the state of the state				
* Colcium Carbonate	s S.I A positive fig. signifies a scaling potential propertional	te to the magnitude of the number	, and a negative fig. signifies	no scaling potential.				

REMARKS: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

By: Greg Ogden, B.S.

(432) 683-4521 * 709 W. Indiana, Midland, Texas 79701 * (fax) 682-8819 Remit to Address: P.O. Box 98, Midland, Texas 79702 Email: martinwaterlahe@nte-online net



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Martin Water Laboratories, Inc.

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Jerry Woodward	L	ABORATORY NO.	16-03-376					
2810 Savoy Place, Midland, TX	79705 s	AMPLE RECEIVED:	3/30/16					
Smart Chemical	R	ESULTS REPORTED:	3/31/16					
(Eunice Brine # 1)	C	OUNTY, STATE:						
	F	IELD OR POOL:						
	DESCRIPTION OF SA	SAMPLES						
Submitted water sample - taken	3/29/16 from Fresh	Water Tank.						
Submitted water sample - taken	3/29/16 from Wellh	nead Sample.						
Physical Properties (milligrams per liter)	No. 1	No. 2	No. 3	No.4				
ity@60°F. 8.369 /	65/90/ 1.0028	1.1920	9,948	165/901				
had	7 80	6.60						
as HCO.	185	142						
	200	20.800						
ss, as cacus	208	20,800						
as Mp	6	3 888						
or Potassium	47	118 617						
14	68	4.082						
2	62	194,540						
	1.9	16		and the second s				
	0	0		1				
ed Solids, Calculated	443	323,188						
6.)_	0.00	0.00						
	0.00	0.00						
	17.100	0.044						
	.013	5.728						
The second se								
	Jerry Woodward 2810 Savoy Place, Midland, TX Smart Chemical (Eunice Brine # 1) Submitted water sample - taken Submitted water sample - taken Submitted water sample - taken Physical Properties (milligrams per liter) ity @ 60°F. 8.349 /. zeived as HCO3 a as Mg or Potassium M4 1 d Solids, Calculated fide arms/m @ 77°F.	Jerry Woodward 2810 Savoy Place, Midland, TX 79705 Smart Chemical (Eunice Brine # 1) CESCRIPTION OF SA Submitted water sample - taken 3/29/16 from Fresh Submitted water sample - taken 3/29/16 from Well Physical Properties (milligrams per liter) No. 1 ity @ 60°F. 8 -3 4 9 /b5/9a/ 1.0028 Selved 7.80 as HCO ₃ 185 a 74 a 74 a 68 a 74 b 74 b 74 b 74 b 74 b 74 b 74 b 74 c 74	Jerry Woodward LABORATORY NO. 2810 Savoy Place, Midland, TX 79705 SAMPLE RECEIVED: Smart Chemical RESULTS REPORTED: (Eunice Brine # 1) COUNTY, STATE: FIELD OR POOL: DESCRIPTION OF SAMPLES Submitted water sample - taken 3/29/16 from Fresh Water Tank. Submitted water sample - taken 3/29/16 from Wellhead Sample. Physical Properties (milligrams per liter) No. 1 No. 2 Rty @ 60°F. 8 .3 4 9 .165/ga / 1.0028 1.1920 ss, as CaC03 208 20,800 as 74 1,920 as Mg 6 3,888 or Potassium 47 118,612 a 74 1,920 as Mg 68 4,082 a 74 1,920 as Mg 62 194,540 bild Solids, Calculated 443 323,188 fide 0.00 0.00 arms/m @ 77*F. 17.100 0.044	Jerry Woodward LABORATORY NO. 16-03-376 2810 Savoy Place, Midland, TX 79705 SAMPLE RECEIVED: 3/30/16 Smart Chemical RESULTS REPORTED: 3/31/16 (Eunice Brine # 1) COUNTY, STATE: 3/31/16 DESCRIPTION OF SAMPLES Submitted water sample - taken 3/29/16 from Fresh Water Tank. Submitted water sample - taken 3/29/16 from Wellhead Sample. Physical Properties (milligrams per liter) No. 1 No. 2 No. 3 1.1920 Gle Colspan="2">OR 20,800 as a CaC03 208 20,800 as Mg of 3,888 Or Potassium At 4 1,9 16 O 0 0 A 20,800 as Mg of 3,888 Or 0 0 At 4 1,9 1,9 <				

By: Greg Ogden, B.S.



Martin Water Laboratories, Inc.

Analysts & Consultants since 1953 Bacterial & Chemical Analysis

TO:	Jerry Woodward	U	BORATORY NO.	16-04-345					
ADDRESS:	2810 Savoy Place, Midland,	TX 79705 SA	MPLE RECEIVED:	4/29/16					
COMPANY:	Smart Chemical	RI	ESULTS REPORTED:	5/2/16					
LEASE:	(Basic Energy)	a	OUNTY, STATE:						
FORMATION:	and the second sec	FI	ELD OR POOL:						
		DESCRIPTION OF SA	MPLES						
No. 1	Submitted water sample - tak	en 4/28/16 from Eunic	e Brine #1 SWI	D at Wellhead.					
No. 2	Submitted water sample - tak	en 4/28/16 from Eunic	e Brine SWD a	t Fresh Water Tan	ik.				
No. 3									
No.4									
Chemical and	Physical Properties (milligrams per liter)	No. 1	No. 2	No. 3	No. 4				
Specific Grav	rity @ 60"F. 9.97	27 165/401 1.1955	1.0028	8.369	165/901				
pH When Re	ceived	6.60	8.40						
Bicarbonate	as HCO ₃	132	181	na anglesi na sagan na da sagan na s	superstance in this plantation along any				
Total Hardne	ess, as CaCO3	22,000	216						
Calcium, as (3	2,160	74	-					
Magnesium,	as Mg	4,034	8						
Sodium and/	or Potassium	120,865	27						
Suitate, as St		4,167	46	10					
chioride, as	u	198,800	57		de anner and anner anne				
Barium as R		3	0.74						
barrany as b		V							
Total Dissolv	ed Solids, Calculated	330,158	392						
a a si kalan si kala									
Walances 6		0.00	0.00						
Resistivity of	has /m @ 77*E	15 220	20.000						
nesisuvity, di	11112/11 @ // F.	15.220	20.900						
Manganese,	as Mn	0.723	0.288						
2011 (1996) (1997)									
h des minst franzers			Man wellings - yold adverting particular						
			ан, манай канадаа аралаан арад арады арады Кала жа арады арала ар						

REMARKS: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

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By: Greg Ogden, B.S.

(432) 683-4521 * 709 W. Indiana, Midland, Texas 79701 * (fax) 682-8819 Remit to Address: P.O. Box 98, Midland, Texas 79702 Email: martinwaterlabs@nts-online.net



Martin Water Laboratories, Inc.

Analysts & Consultants since 1953 **Bacterial & Chemical Analysis**

TO:	Jerry Woodward	LAB	ORATORY NO.	16-06-46					
ADDRESS:	2810 Savoy Place, Midland, TX 797	05 SAM	MPLE RECEIVED:	6/3/16					
COMPANY:	Smart Chemical	RES	ULTS REPORTED:	6/6/16					
FASE:	(Basic Energy)	cor	UNTY, STATE:						
FORMATION:	(man ov)	FIF	FIELD OR POOL						
PORMATION.	DES	CRIPTION OF SAM	FIELD OR FOOL						
No 1	Submitted water sample - taken 6/2/1	6 from Eunice F	Trine #1 - well	head					
No.2	Submitted water sample - taken 6/2/1	6 from Eunice F	Brine #1 - fres	h water sample.					
No.3	Gubilitites mater sample mater ear	O HOIT LETITE		I Water stripter	anne and a second the static static state and the second				
No.4		LARGE CONTRACTOR AND AND A PARTY OF A		And and a second s					
Chemical and	Physical Properties (milligrams per liter)	No. 1	No. 2	No. 3	No.4				
Specific Gravity	1 8 60"F. 9.994 165 /001	1.1975	1.0028	8:319	The Teal				
pH When Same	pled				1-62 -1-1-				
pH When Rece	lived	6.6	8.0						
Bicarbonate as	HCO ₃	171	185		and anti-activation provide the second state of the second state o				
Total Harrinet		22.000	204						
Calcium as Ca	, 8 6 6 6 5	1 680	67		ander and after an and destruction of the second				
Magnesium, at	Ma	4 325	9						
Sodium and/or	Potassium	111,695	43						
Sulfate, as SO4		4,153	63						
Chloride, as Cl		184,649	57	it					
Iron, as Fe		26	11						
Barium, as Ba		0	0						
Total Dissolved	Solids, Calculated	306,674	424						
Carbon Dioxide	e, Calculated	70	3		and the state of t				
Hydrogen Sulfi	de	0.0	0.0						
Resistivity, ohn	ns/m @ 77°F.	0.045	19.200						
Corrosiveness		Mod-Severe	Mild						
Barium Sulfate	Scaling Tendency	None	None	J					
Calcium Carbo	nate S.I. @ 77° F. (Stiff-Davis)*	1.29	0.63						
Calcium Carbo	nate S.I. @ 122" F. (Stiff-Davis)*	2.53	1.11						
Calcium Sulfat	a Scaling Tendency	None	None						
Manganese		5.03	0.093						
	-								

REMARKS: The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

-

By: Greg Ogden, B.S.

(432) 683-4521 * 709 W. Indiana, Midland, Texas 79701 * (fax) 682-8819 Remit to Address: P.O. Box 98, Midland, Tenas 79702

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Lea	se	BES Asset #	AF	1	F00	TAGE	UNIT	SEC	TOWNSHIP	RANGE	County
Eunice B	krine #1	18476	30-025-	26884	630 FSL	2427 FEL	0	34	215	37E	LEA
BES			Brine	400	Max PSI		Fresh		Weil M	ionthly capa	ability 81,840 bbl.
Month	Start	End	Total	PSI	F/W Start	F/W End	Total	F/w to Br	ine		
Jan	299,000	342,769	43,769	250	296,000	339,782	43,782		Year throug	put capal	bility 982,080 Bbl.
Feb	0	32,350	32,350	250	0	32,380	32,380	Reset 1-31-19	5		
Mar	32,350	73,144	40,794	250	32,380	73,501	41,121				
Apr	0	28,208	28,208	250	0	21,563	21,563	Reset me	ters April 1st		
May	28,208	19,012	27,115	250	21,563	17,881	28,173	f/w 3185	5 b/w 36311		
Jun	19,012	56,621	37,609	250	17,881	57,236	39,355	Teste	d Formation	19th 225 ps	i four hours Good
July	56,621	99,504	42,883	250	57,236	97,687	40,451				
August	0	18,388	18,388	250	0	18,885	18,885	Reset met	er		
Sep	18,388	45,251	26,863	250	18,885	45,855	26,970				
Oct	45,251	69,321	24,070	250	45,855	70,064	24,209				
Nov	69,321	91,503	22,182	250	70,064	92,416	22,352				
Dec	91,503	113,852	22,349	250	92,416	114,955	22,539				
Year total	2015		366,580				361,780				

Lea	se	BES Asset #	A	PI	FOO	TAGE	UNIT	SEC	TOWNSHIE	RANGE	County
Eunice B	rine #1	18476	30-025-	26884	630 FSL	2427 FEL	0	34	215	37E	LEA
BES			Brine	400	Max PSI		Fresh		Well M	onthly capa	ability 81,840 bbl.
Month	Start	End	Total	PSI	F/W Start	F/W End	Total	F/w to B	ir Year throug	hput capal	bility 982,080 Bbl.
Jan	113,852	6,730	19,185	250	114,955	5,800	18,947	Reset Bri	ine ended 126307 1	/22 Reset Fresh	meter ended 128102 1/22
Feb	0	13,170	13,170	250	0	14,123	14,123				
Mar	13,170	20,480	7,310	250	14,123	21,809	7,686				
Apr	20,480	30,109	9,629	250	21,809	31,795	9,986				
May	30,109	35,691	5,582	250	31,795	37,588	5,793				
Jun	0	5,148	5,148	250	0	5,305	5,305	Tes	ted formation	for 4 hour	s 6/30/16 Good
July			0				0				
August			0				0				
Sep			0				0				
Oct			0				0				
Nov			0				0				
Dec			0				0				
Year total	2016		60,024				61,840				

Submit I Copy To Appropriate District St	tate of New Mexico			Form C-103			
District I Energy, M	inerals and Natural R	esources	WELL ADINO	October 13, 200			
1625 N. French Dr., Hobbs, NM 88240 District II	ICEDUATION DI	ICION	3002526884				
1301 W. Grand Ave., Artesia, NM 88210 OIL COP	NSERVATION DIV	ISION	5. Indicate Type	of Lease			
1220 1000 Rio Brazos Rd., Aztec, NM 87410	d., Aziec, NM 87410 Sonto Fe, NM 87505						
District IV 5 1220 S. St. Francis Dr., Santa Fe, NM 87505	anta FC, NM 87505		6. State Oil & G	as Lease No.			
SUNDRY NOTICES AND REPO	ORTS ON WELLS		7. Lease Name	or Unit Agreement Name			
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR DIFFERENT RESERVOIR LISE "APPLICATION FOR PERM	TO DEEPEN OR PLUG BA	CK TO A	Participal And DW 002				
PROPOSALS.)			8 Well Number	1 BW - 002			
I. Type of Well: Oil Well Gas Well 0	Other Brine		# 1				
2. Name of Operator BASiC Energy Services		9. OGRID Num	ber				
3. Address of Operator		10. Pool name o	or Wildcat				
P.O. Box 10460 Midland Tx. 79702			Salado				
4. Well Location							
Unit Letter <u>O: 630</u> feet from the Sout	h line and 2427 fee	et from the	East line				
Section 34 Township	21 S Range 3	37 E	NMPM	County Lea			
11. Elevation (Show whether DR, RKB	R, RT, GR, etc	.)				
				and the state of t			
PERFORM REMEDIAL WORK PLUG AND AB		MEDIAL WOR MMENCE DR		ALTERING CASING			
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PERFORM REMEDIAL WORK PLUG AND AB TEMPORARILY ABANDON CHANGE PLAI PULL OR ALTER CASING MULTIPLE CO DOWNHOLE COMMINGLE MULTIPLE CO OTHER: Image: Completed operations of the proposed work). SEE RULE 19.15.7.14 NM. recompletion. 9/14 Called District I and notified Maxi Brown that tub 10/14 RU/MI Equip. MIRU reverse unit 1/11/14. SDFN 13/14 POH W/43 jts. 2 7/8 PCT (1389') RIH W/Bit and 14/14 POH W/Bit RIH W/OS Jars and Bumper Sub POI 15/14 RIH W / Mill Shoe wash over 3' long work thru the 1375 acts like parted Csg 7" handed job over to 74 17/14 TIH with 4 % concave Mill to tight spot mill down 20/14 TIH with Concave Mill to 1372 worked till access gone on outer edge.SDFN 21/14 TIH with Tapered Mill and string mill on top with continue to 1500' TOH with Mill and String Mill. so wanted due to MIT done in 2013.SDFN 22/14 TIH with Production string and 4 % bit to 1500' tested 5 ½ to 500 psi good with reverse unit. Rele shows 10# / gal. Tubing was set @ 1544' pud Date:	ANDON AND AND AND AND AND AND AND AND AND AN	MEDIAL WOF MMENCE DR SING/CEMEN HER: ails, and give p tions: Attach hole with a sp l and torqued u ession block PC ed collar. Had to rom fish started t spot TOH wite ill to 1390' mile ht spot down to ked to Mark W arker bed 9 @ ing for rebuild my knowled d Sales MGF	RK RILLING OPNS. TJOB ertinent dates, includi wellbore diagram of p ill of =/- 100bbls. Cal p like on tubing. Rais OH showed pinch on p ight spot 33' up. RIH torqueing @ 1373 de h Mill SDFN Il for one hour no pro- top of fish milled do hitaker approved once 1554' changed out we of tree to place back i ge and belief. RDATE1/30/14	ALTERING CASING P AND A mg estimated date of starting proposed completion or 1 for service unit. e tubing in safe zone SDFN one side. Close BOP SDFN W / Overshot no go RIH W own to 1394' Bad spot @ 13 gress TOH mill shoed cut rit wn to 1450 btm. Of 7'' te TD we could test Csg. If we cell head to 3M stile X 5 ½ n operation. Tested brine			

APPROVED BY: Conditions of Approval (if any):

TITLE



TD @ 1818'

Submit To Approp	riate District O	ffice			5	State of No	ew M	exico	-						Fo	orm C-105
District 1 1625 N. French Da	Hobbs, NM 8	8240		Ener	rgy, N	Ainerals an	d Nat	ural Re	sources		1 WELL	ADI	NO	R	levised A	ugust 1, 2011
District II 811 S. First St., Ar	tesia, NM 8821	0			0:1	Company	tion 1	Divisio			300252688	4	NU.			
District III 1000 Rio Brazos R	Id. Artec. NM	87410			122	Conserva	t Fra	Division)r		2. Type of L	ease			EED/DID	I A NI
District IV 1220 S. St. Francis	Dr., Santa Fe.	NM 87505			122	Santa Fe. 1	NM 8	37505	4.		3. State Oil & Gas Lease No.					
WELL	COMPLE	TION	ORR	ECO	MPL	ETION RE	POR	TAN	LOG				-			
4. Reason for fil	ling:										5. Le	ase N	ame or U	nit Agr	eement Na	une
COMPLET	ION REPOR	RT (Fill in	n boxes #	1 through	h #31 f	or State and Fe	e wells	only)			6. Well Num	ber:	NE BW-	02		
C-144 CLO #33; attach this a	SURE ATTA	CHMEN the C-14	NT (Fill 4 closure	in boxes report in	#1 thro	bugh #9, #15 D dance with 19.	ate Rig 15.17.1	Released	and #32 and C)	Vor	#001					
7. Type of Com	pletion:	VORKON		DEEPEN	ING	PULGBAC		MEEEBE	NT PESER	VOIR	OTHER	SET	S S LINE	RIN 7		
8. Name of Operator BASIC ENERGY SERVICES L.P.									AT KLOLK		9. OGRID	SL1	LINE	K III I		
10. Address of C	perator P.O.	10460 M	IDLANI) TX 797	702					-	11. Pool name	or W	ildcat S	ALAD	0	
																1
12.Location	Unit Ltr O	Section 34	n	Townshi 21S	ip	Range 37E	Lot		Feet from 630'	the	S Line	Fee 242	t from the	EL	ine	LEA
Surface:																
BH:				_												
13. Date Spudde 7/1/80	d 14. Date 7/7/80	T.D. Rea	ched	15. Da	ate Rig	Released		16. 7/1	Date Comp 7/80	leted	(Ready to Proc	tuce)	1	7. Elev T, GR 426.5	vations (Dl ., etc.)	F and RKB,
18. Total Measu 1816'	8. Total Measured Depth of Well 19. Plug Back Measured Depth 20. N/A						Was Direc	tiona	I Survey Made	?	21. Ty CBL, C	e Elec	ctric and O	ther Logs Run		
22. Producing In	terval(s), of the	his compl	letion - T	op, Botto	om, Na	me SALA	DO			-		1320'	-			
23				(CAS	ING REC	ORI	(Rep	ort all st	ring	s set in w	ell)				
CASING S	IZE	WEIGH	IT LB./F	T	1	DEPTH SET		HC	DLE SIZE		CEMENTIN	IG RE	CORD	,	AMOUNT	PULLED
7"			24		_	1450'			8 3/4"	-	700 SX SURF.					
					-						-					
24					I TNIT	D DECODD				1.25		TIDI	NC DEC	OBD		
SIZE	TOP		BOT	ТОМ	LINE	SACKS CEN	IENT	SCREE	N	S12	E	D	EPTH SE	T	PACK	ER SET
5.5 15.5# 8/25/12	SURF.		137:	5'		120sx "C" PPG SURI	14.8 F.			27	7/8 J-55 PC	1	544'		N/A	
76 Decforation	tecord (inter	aral cize	and num	har) OF	DEN LI			22 40	ID SHOT	ED	ACTUDE CE	IMEN	UT SOL	EE7	ETC	
20. renoration	i recora (inter	Y00, 5126,	and mun	ider) Or	LIVIN	OLL		DEPTH	INTERVAL	IK	AMOUNT A	ND I	KIND M/	TERL	AL USED	
								N/A		_	N/A					
										_	-					
28							PRO	DUC	TION							
Date First Produ	ction		Productio	on Metho	od (Flo	wing, gas lift. J	oumping	- Size an	d type pump)	Well Status	s (Pro	d. or Shu	- <i>in</i>)		
			FRESH	WATER	INDUC	ED THRU TB	G.				PROD.					
Date of Test	Hours Te	ested	Cho	ke Size		Prod'n For Test Period		Oil - Bb		Gas	s - MCF	W	ater - Bb		Gas -	Oil Ratio
Flow Tubing Press.	Casing P	ressure	Calc	ulated 24 r Rate	+-	Oil - Bbl.		Gas	- MCF	1	Water - Bbl.		Oil Gr	avity -	API - (Co	rr.)
29. Disposition of	of Gas (Sold, a	used for f	uel. vente	ed. etc.)						1		30.	Test With	essed I	By	
31. List Attachm	nents															
32. If a temporar	y pit was used	d at the w	ell, attac	h a plat v	with the	location of the	e tempo	rary pit.								
33. If an on-site	burial was use	ed at the v	well, repo	ort the exa	act loca	ation of the on-	site bur	ial								
						Latitude					Longitude				NA	AD 1927 1983

I hereby certify that the infor	mation shown on both sides of this form is	true and complete to the best of	my knowledge and belief
C:	Printed	771-1	Dette
Signature	Name	1 itle	Date

E-mail Address

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Souther	astern New Mexico	Northwestern New Mexico					
T. Anhy 668'	T. Canyon	T. Ojo Alamo	T. Penn A"				
T. Salt 1235'	T. Strawn	T. Kirtland	T. Penn. "B"				
B. Salt 2400'	T. Atoka	T. Fruitland	T. Penn. "C"				
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"				
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville				
T. Queen	T. Silurian	T. Menefee	T. Madison				
T. Grayburg	T. Montoya	T. Point Lookout	T. Elbert				
T. San Andres	T. Simpson	T. Mancos	T. McCracken				
T. Glorieta	T. McKee	T. Gallup	T. Ignacio Otzte				
T. Paddock	T. Ellenburger	Base Greenhorn	T.Granite				
T. Blinebry	T. Gr. Wash	T. Dakota					
T.Tubb	T. Delaware Sand	T. Morrison					
T. Drinkard	T. Bone Springs	T.Todilto					
T. Abo	Τ.	T. Entrada					
T. Wolfcamp	Τ.	T. Wingate					
T. Penn	T. Penn T.						
T. Cisco (Bough C)	T.	T. Permian					

OIL OR GAS SANDS OR ZONES

No. 1,	from		to	No. 3, 1	rom		to			
No. 2, 1	from		to	No. 4, 1	rom		to			
IMPORTANT WATER SANDS										
Include	data or	rate of war	ter inflow and elevation to which wate	r rose in ho	ole.					
No. 1, 1	from		to			feet	********			
No. 2, 1	from		to			feet				
No. 3, 1	from					feet	*********			
LITHOLOGY RECORD (Attach additional sheet if necessary)										
From	То	Thickness In Feet	Lithology	From	То	Thickness In Feet	Lithology			



August 29, 2013

Jim Griswold NM Oil Conservation Divison 1220 South St. Francis Dr. Santa Fe, NM 87505

Dear Jim,

I am submitting a draft surface subsidence monitoring plan for Basic Energy Services' Eunice 1 (30-025-26884) and Salado 2 (30-025-32394) brine wells.

Please let me know if you want any changes. Once we have incorporated your ideas, then we will contact the surface owners (see attached air photos). If we are unable to obtain permission to install a monument, then we will contact you and formulate an alternate plan.

Thank you,

Brian Wood

cc: Alvarado



August 29, 2013

VIA EMAIL: brian@permitswest.com

Permits West, Inc. 37 Verano Loop Santa Fe, NM 87508 Attn: Brian Wood

Re: Proposal for Subsidence Measurement at Brine Wells

Dear Mr. Wood:

As requested, we've prepared this proposal for the technique of measurement for subsidence, or the lack thereof, for brine wells. For each well, we propose that eight (8) monuments be set to the standard set forth in the attached document entitled, "Vertical Control Monument Installation" in Cardinal directions from the well head as follows:

- 1) Two monuments, east and west, at a distance of 75 feet from the well.
- 2) Two monuments, north and south, at a distance of 150 feet from the well.
- 3) Two monuments, east and west, at a distance of 300 feet from the well.
- 4) Two monuments, north and south, at a distance of 600 feet from the well.

All monuments would be installed and, using static global positioning surveying methods, coordinates would be determined using the Online Positioning User Service (OPUS) at ngs.noaa.gov for the initial elevations of each vertical control monument. A ninth elevation would be obtained at the top of each well head. Further, the relative elevations of all monuments and the well head would be measured using a digital level with an accuracy of a 1/250th of a foot (+/-0.004ft). This measurement of relative elevations would then be repeated two to three weeks later to ensure that other factors, such as the effect of actually setting the vertical control monument or any other installation-specific anomalies, can be reasonably eliminated from each individual monument. Then, data collection will begin and measurements would be taken at three months, six months, and a year, or at any other interval required, for monitoring of any elevation changes that may occur. Should you have any questions or require more information, please do not hesitate to call.

Sincerely,

Steven J. Sandoval, NMPS 12351 Principal Surveyor



Attach: Vertical Control Monument Installation

Phone: (575) 443-6202 Field Mobile: (575) 491-2371 Fax: (575) 443-1151

www.constructionsurveyingservices.com email: CSSAlamo@aol.com

Top Security[™] 3-D Rod Monument Installation Instructions

MONUMENT INSTALLATION INSTRUCTIONS FOR TOP SECURITY™ GPS 3-DIMENSIONAL ROD MONUMENT SYSTEM

CAUTION: Before beginning any monument installation, contact your local ONE-CALL Utility Location Service to verify the safety of your chosen location

IMPORTANT - Read all instructions completely and thoroughly before starting installation.

MATERIALS REQUIRED FOR SETTING MONUMENT:

- 1. Top Security[™] Rod with thread
- 2. Aluminum rod sections with thread
- 3. Spiral drive point
- 4. Aluminum survey cap (special combination compression fit/threaded cap)
- 5. OPTIONAL: DISC-LOCK vibration-proof lock washers (pair)
- 6. BMAC Access Cover (BMAC-5 for 5" PVC pipe or BMAC-6 for 6" PVC pipe)
- 7. PVC Pipe (5" or 6", Schedule 40)
- 8. Steel Stamp Set (for marking information on survey cap)
- 9. Concrete mix
- 10. Water
- 11. Trowel
- 12. Eclectic® UV-6800 Adhesive
- 13. Caulking gun for UV-6800 Adhesive
- 14. Fine-grained washed or play sand
- 15. Installation tools
- 16. Reciprocating driver (Pionjar 120, Cobra 148, or Wacker BHB 25)
 - a. Driving Adapter (MDA with sledge hammer, PDA with reciprocating driver)
 - b. DPA Steel Drive Pin
 - c. Lubricating oil for driving adapter and stainless drive pin
 - d. Vise grip pliers (2) OR Pipe Wrench (two 6" wrenches)
 - e. Hacksaw
 - f. File

- g. Post Hole Digger or Auger
- h. Shovel
- i. Work gloves and proper eye protection and clothing

INSTALLATION

1. THE TIME REQUIRED TO SET AN AVERAGE MARK USING THESE PROCEDURES IS 30 TO 45 MINUTES.

2. Using the Eclectic UV-6800 adhesive, glue BMAC Access Cover to a 24-inch (600 mm) long section of PVC pipe. This will allow the glue to set while continuing with the following setting procedures.

3. *IMPORTANT:* Use proper eye and ear protection! Using a post hole digger, auger, or shovel, dig or drill a hole in the ground at your site, approximately 12 inches (300 mm) in diameter and 36 inches (915 mm) deep.

4. Attach the spiral drive point to one end of the aluminum rod section with a stainless steel thread. On the opposite end of the aluminum rod attach the Stainless Steel Drive Pin (hand tighten both the drive point and the SS Drive Pin). The SS Drive Pin will be used as the impact point for the Driving Adapter in driving the rod into the ground. Drive this section of the rod with a reciprocating driver (*Pionjar 120, Cobra 148, Wacker BHB 25*). Be certain that the reciprocating driver is in the BREAKER position for driving the rod (see owner's manual for setting). Drive the rod section until the Driving Adapter is within approximately 1-inch (25 mm) of ground level e., with approximately 4-inches (100 mm) of rod showing above ground).

5. Remove Driving Adapter and Stainless Steel Drive Pin from installed rod section. Attach another section of aluminum rod. Tighten securely (using DISC-LOCK washers if desired) with two pipe wrenches to rod section already installed. Attach SS Drive Pin and Driving Adapter to top of rod section and continue driving rod sections (see STEP 4) until installation of rod sections slows to the REFUSAL rate (defined as a driving rate of more than 1 minute to drive the rod 1 foot (25 mm) in the ground). <u>IMPORTANT NOTE: TO MEET NGS REQUIREMENTS FOR "REFUSAL" YOU MUST ONLY USE A</u> <u>RECIPROCATING DRIVER.</u> Rod should be driven completely into the ground (and 3 inches [75 mm] below ground level).

6. The last section of rod should now be marked for removal (so the top of the last rod section will be 3 inches [75 mm] below ground level) from the top of the monument assembly. Remove the rod by attaching a pipe wrench on either side of the common joint with the next lower rod section and carefully untighten the top rod from this assembly. IF YOU WERE ABLE TO DRIVE THE LAST SECTION ROD 3 INCHES (75 mm) BELOW GROUND LEVEL, YOU CAN SIMPLY REPLACE THIS ROD SECTION WITH A COMPLETE TOP SECURITY ROD SECTION - GO TO STEP 9. 7. Take the rod section you removed in STEP 6 and place it next to a Top Security[™] rod section. Using a hacksaw, cut off the portion of Top Security rod section marked. When this is completed, remove approximately 3 inches (75 mm) of the "fins" from cut end of Top Security rod section. Recommended procedure is to use a vise grip pliers and "peel" the fins (take the vise grip pliers and peel the fins and break them off the remaining rod portion by coming down from the top of the rod and bending each fin "back and forth" until the fin is removed). This is best done in 1-inch (25 mm) sections.

8. Use a file to remove any burrs from cut end (and slightly BEVEL the cut end of the Top Security rod section). GO TO STEP 10.

9. IF YOU DID NOT NEED TO CUT LAST SECTION OF ROD IN STEP 6 AND HAVE REPLACED THIS ROD WITH A TOP SECURITY ROD, you can use the Threaded Insert to attach the survey cap to the rod assembly. To do this take the SS Drive Pin, attach it to the Treaded Insert, and then drive the Threaded Insert into the socket of the survey cap. Be certain that the Threaded Insert has been driven <u>completely</u> into the socket. Take the completed survey cap, remove the SS Drive Pin, and using the DISC-LOCK washer (composed of two washers mated together so the beveled sides are placed together to form a "ratchet" appearance) attach the survey disk to the Top Security rod section by screwing the cap down onto the Top Security rod section. Tighten firmly and securely using a wrench. Go to STEP 11.

10. IF THE TOP SECURITY ROD SECTION NEEDS TO BE CUT, use the compression-fit survey cap (with socket) to attached to the Top Security rod. Make a mark approximately 1-inch (25 mm) from the top of the rod (this is where the bottom of the survey cap socket should be driven to). Taking the compression-fit cap, carefully tap the cap onto the Top Security rod using a rubber or urethane-faced hammer and driving the cap completely onto the rod until it reaches the mark on the rod. Be sure the cap is "square" on the rod.

11. Backfill and pack with fine-grained washed or play sand around rod section (sand should be filled to about 20 inches (500 mm) below ground level). Place the PVC pipe and BMAC Access Cover assembly over and around the rod. Tamp BMAC assembly so it is flush with the ground. The survey cap on the rod should be 3 inches (75 mm) below the BMAC Access Cover.

12. Prepare and place the concrete mix around the outside of the PVC pipe and around the BMAC Access Cover, up to the top of the Cover. Trowel the concrete until a smooth and neat finish is produced. Make certain that the concrete has not "seeped" into the Cover or Cover screw. Remover the Access Cover Lid from the Cover Frame and using water, rinse the frame and screw areas to insure no concrete mix residue remains in these areas.

13. Continue to backfill and pack with sand inside the PVC pipe around the rod to about 6 inches (150 mm) below ground level.

14. Remove all debris and excess dirt to leave area in original condition.

15. Install CARSONITE® model CBM-250 Boundary Marker Post to witness and protect the monument assembly.

16. IMPORTANT: Whenever opening the BMAC Access Cover, protect the threaded opening of the Access Cover Frame by using a piece of duct or masking tape to cover this opening, when exposed, to prevent foreign objects from falling into it. Take care in reinstalling the Access Cover Lid to prevent foreign objects from falling into the threaded opening while tightening screw of Access Cover Lid into Access Cover Frame.

QUESTIONS? PLEASE CALL US FOR ASSISTANCE. CALL TOLL-FREE IN THE U.S.A., CANADA, AND THE CARIBBEAN ISLANDS AT 1-800-356-7388. OUTSIDE THE U.S.A., CALL 1-608-249-8549.

Eunice Brine Station Needed equipment for security and access system




American Valve & Meter, Inc.

1113 W. BROADWAY

P.O. BOX 166 HOBBS, NM 88240

T0: Basic Energy

DATE: 03/28/16

This is to certify that:

I, Tony Flores, Technician for American Valve & Meter Inc. has checked the calibration of the following instrument.

8 "Pressure recorder

Ser# 4299

at these points.

Pressure #			*	Pressure #	
Test	Found	Left	Test	Found	Left
- 500	- S	- 500	-	-	
- 700	- A	- 700	-	-	-
- 1000	- M	- 1000	-	-	-
- 200	- E	- 200	-	-	-
- 0	-	- 0	-	-	-

Remarks:

Signature: Jong Ham

Eunice Well BW-002

Aerial showing no drilling nor Pipe Lines in the AOR



Chavez, Carl J, EMNRD

From:	Chavez, Carl J, EMNRD
Sent:	Wednesday, November 18, 2009 7:02 AM
То:	'Prather, Steve'; 'gandy2@leaco.net'; 'James Millett'; 'Clay Wilson'; 'Bob Patterson'; 'David Pyeatt'; 'garymschubert@aol.com'; 'Gary Schubert'
Cc:	Griswold, Jim, EMNRD; VonGonten, Glenn, EMNRD; Sanchez, Daniel J., EMNRD
Subject:	UIC Class III Well Annual Report Schedule for Submittal & Content REMINDER- 2010
Attachments:	Annual Reports 2010.xls

Gentlemen:

Good morning. You may recall an e-mail message from me this past Summer alerting you to the reporting provision of your current discharge permit (permit) and how the New Mexico Oil Conservation Division (OCD) is stepping up its efforts to track reporting under issued permits.

Please find attached a spreadsheet listing the dates that OCD expects to receive your Annual Reports and/or any reporting requirements from your permit. If you are an operator with limited reporting requirements based on your permit, you are welcome to follow the format and content required from more recent permit renewals issued by the OCD, which are more comprehensive and constitute a report, Any renewed permits will likely require similar content anyway.

Please plan on meeting the Annual Report submittal dates in January of 2010 as failure to submit the report will constitute a violation under the Federal Underground Injection Control (UIC) Program and reporting to the United States Environmental Protection Agency, which could result in the shut-in and/or plug and abandonment of your brine production well.

Please contact me if you have questions. Thank you in advance for your cooperation in this matter.

Carl J. Chavez, CHMM New Mexico Energy, Minerals & Natural Resources Dept. Oil Conservation Division, Environmental Bureau 1220 South St. Francis Dr., Santa Fe, New Mexico 87505 Office: (505) 476-3490 Fax: (505) 476-3462 E-mail: <u>CarlJ.Chavez@state.nm.us</u> Website: <u>http://www.emnrd.state.nm.us/ocd/</u>index.htm (Pollution Prevention Guidance is under "Publications")

CC: Brine Well File "Annual Reporting"

RECEIVED OCE 2012 JUST - 3 P 12: 11 C

ANNUAL BRINE WELL REPORT

BASIC ENERGY SERVICES L.P.

EUNICE BRINE WELL # 001 BW - 002

API # 3002526884

December 15, 2011

DAVID ALVARADO

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VADOSE ZONE AND WATER POLLUTION------Page 3 ADDITIONAL SITE SPECIFIC CONDITIONS BRINE WELL IDENTIFICATION, OPERATION, MONITORING, BONDING AND REPORTING PRODUCTION METHOD WELLPRESSURE LIMITS MECHANICAL INTEGRATY TESTING TESTING SCHEDULE PRODUCTION / INJECTION VOLUMES ANALYSIS OF INJECTION FLUID AND BRINE AREA OF REVIEW (AOR)

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SUMMERY OF BRINE WELL BW – 02, 2011-----Page5 CERTIFICATION SIGN OFF REQUIERMENTS WQCC SUB SECTION G 20.6.2.5101 CONDITIONS ACCEPTED BY WITH SIGNATURE

SUPPORTING EXHIBITS LISTED FROM A - R

Load line # 6 chartA
Equalizing Line on tanks chartB
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Well diagram of well bore Eunice Brine #001K
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Fresh Water Analysis For 2011Q
Brine Water Analysis For 2011R

Payment of Discharge Plan Discharge Fees

Basic Energy Services LP has paid all known fees needed to pursue its Class III Brine well BW-002 Eunice Brine # 001.

Permit Expiration and Renewal

Pursuant to Regulation 20.6.2.3109 NMAC Basic Energy Services LP permit will expire on January 6, 2014 renewal will be submitted no later than 120 days before expiration date.

Permit terms and Conditions

Pursuant to WQCC Regulation 20.6.2.3104 Basic Energy Services will ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition Basic Energy Services LP will apply the rules and regulations administered by OCD pursuant to the Oil and Gas act, NMSA 1978, section 70-2-38.

Owner / Operator Commitments

Basic Energy Services will abide by all commitments submitted in the discharge permit any attachments and subsequent amendments or condition for approval.

Modifications

On 12/27/10 the Eunice Brine well was pulled and a scraper run was conducted to a depth of 1460 ft. 12/28/2011 Gray Wire Line Co. rigged up over the hole and a casing inspection log was run and recorded copies were taken to the Hobbs OCD for review. It was found that the casing shoe was at 1,454 ft. at ground level also a Cement Bond Log was conducted and also taken with the casing inspection log to Hobbs OCD Office for review. A packer was set at a depth of 1,440 ft. and the annulus was pressured to 460 PSI it had leaked 60 pounds in 45 minutes. Pump truck then placed his hook up onto the tubing and a formation MIT test started on the formation on 1/3/11 a MIT was run for four hours and passed it was witnessed by OCD Mark Whitaker. After bleeding down the well back to the stock tanks Basic Energy Services LP proceeded with an RBP and a pacer to determine

the leakage and found a hole 30 foot from surface. Under OCD's direction and advice, the casing was excavated down to the bad pipe and was replaced, tested and covered back. Where a MIT on casing proceeded and passed please see C-103 Subsequence Report for further detail on all that was performed on this well. Eunice Brine was placed back into production on 1/19/11.

Waste Disposal and Storage

The Eunice Brine # 001 has had zero wastes that needed to be hauled to CRI from January 2011 to December 15, 2011 the date this report is being made. If needed of this type of disposal is needed to the end of the year Basic Energy Services LP will give notice and detail of any operations to NM OCD.

Drum Storage

All drums that might be needed at the Eunice Brine # 001 will be contained with an impermeable containment. All drums that might be stored will contain their bungs and will be placed on a horizontal plane in an impermeable containment.

Process, Maintenance and Yard Areas

The discharge lines or load lines at the Eunice Brine Station do not have loading pads with curbs. Each load line has a windowed cut plastic barrel incorporated into the deign surrounding the load line valve. This method has proven well in containing the dripping of any brine water once the valve is closed and hose disconnected. Each truck loading before departure drops their hose into the bottom of the barrel and vacuums or sucks out any fluids.

Above Ground Tanks

Basic Energy Services LP has a twenty mill plastic liner underneath the tanks and it over laps the berm that surrounds the tanks and berm area. The berm area was constructed to hold one and a half times the amount of the total volume. The fresh water tank also is contained with a 20 mill plastic that was constructed and lays over a berm capable of holding one and half times the amount of total volume.

Labeling

All tanks are marked with black stenciled paint wording to their contents BRINE WATER, FRESH WATER.

Below – Grade Tanks / Sumps and Pits / Ponds

The Eunice Brine # 001 Station does not have any below grade tanks, sumps, pits or ponds. No modifications needs to be reported at this time and is not applicable. Location and battery is rendered nonhazardous to wildlife, including migratory birds. Inspection of the system's interring connecting tanks lines have been tested and are in good standing. Please see attached diagram of Methodology of Mechanical testing sheet with copies of charts that Beto Gonzales performed in the testing of the lines as per request of Jim Griswold.

Underground Process / Wastewater Lines

The facility's production line that is connected to the annulus and leads to the filling of the production tanks at the Eunice Brine #001 Station was tested on 11/16/11 and can be seen on char # 4 including the Methodology chart and facility schematic diagram. Please see Schematic diagram of the facility.

Class V Wells

The Eunice Brine # 001 and its facility is only a Class III and are not applicable to a Class V.

Housekeeping

Daily inspection and visual inspection is done daily and recorded on a daily log by the lease operator where it is turned into the office once a month and recorded and filed. All monthly logs are available at your request if needed. If any abnormalities occur the lease operator will notify us immediately and proper procedures are followed.

Spill Reporting

No discharge or leaks and releases have taken place from January 2011 to December 15, 2011 date this report was done that would require action pursuant to WQCC Regulation 20.5.12.1203 NMAC and OCD Rule 116 (19.15.3.116 NMAC)

OCD Inspections

No known conditions have been required on the facility or citations from BLM or OCD. The facility was visited by Jim Griswold and also Hobbs OCD earlier this year.

Storm Water

A SPCC plan has been assigned to Tec-Tra-Tech. and will be working on all of Basic Energy Services LP Yards and SWD with Brine wells they are scheduled to be in New Mexico after the 19th of December.

Unauthorized Discharge

Basic Energy services LP will abide to the WQCC standards listed in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Interstate Streams) no known streams exist in the area of the Eunice Brine # 001.

Well work over Operations

On 1/15/11/ Basic Energy Services LP rigged up over the well bore of the Eunice Brine Well # 001 and brought in a reverse unit where we drilled to a depth of 1540 ft. this depth was obtained thru the Dennis W Powers report on November 29, 2010. His Study of the bore hole showed that the production should be focused on the interval above the MB 103 by location the tubing base near the top of the MB 109 an appropriate depth selected was 1, 540 feet form ground level. This can be read on page 6 of his report and study of the Eunice Brine # 001. Detail of work can be read on Subsequence of work reported on the C-103. Also with this report a copy of Dennis W Powers report will be sent and available on request if needed.

Vadose Zone and Water Pollution

Basic Energy Services LP will address and investigate and report to OCD any discharge pursuant to WQCC 20.6.2.4000 NMAC and will remediate, abate and submit subsequent reports.

Additional Site Specific Conditions

Basic Energy Services LP has not received any additional site specific conditions. It has passed its MIT testing on Casing and Formation in January 20011 and its annual scheduled testing of formation in September of 2011 and was witnessed by New Mexico State Hydrologist Engineer Jim Griswold.

Brine Well Identification, Operation, Monitoring, Bonding and Reporting

Basic Energy Services LP Identifies the well with a sign on the location at the facility.

Eunice Brine # 1 (BW-002) API 33 025 26884 O – Sec. 34 – T21S – R37E

Production Methods of Operations

Fresh water is injected via pump that flows thru an in line meter registering bbls before it enters the tubing. The base of the tubing is at a depth of 1,540 feet where it is located between MB 103 and MB109. Flow is registered down stream thru a bbl meter before entering the stock tanks. Both meters are read daily and recorded on a production sheet that is turned in daily and is recorded monthly. Recorded with the bbls in and out are the run tickets of sales for that day also recorded on the daily sheet.

Well pressure limits

The maximum operating pressure of 450 PSI on the BW-002 has never been reached. The average PSI operating pressure recorded on a daily operation is 140 to 220 PSI it also is recorded on the lease operators daily / monthly sheet that is recorded and is available on requested.

Mechanical Integrity Testing

Passed in January 3, 2011 MIT Casing, Formation Passed in September 28, 2011 Scheduled and was witnessed by Jim Griswold.

Testing Schedule

Basic Energy Services will Schedule our next MIT on Casing and MIT on formation per notice given to Basic energy services LP form NM State OCD request.

Production and Injection volumes

Production Volumes recorded in bbls in 2011 form January 3, 2011 to December 15, 2011 totaled 127,633 bbls of Brine. Injection volumes recorded in bbls in 2011 from January 3, 2011 to December 15, 2011 totaled 120,733 bbls of Fresh. In October the fresh water meter was changed and showed that the recording of fresh water was off 9%. Please accept this adjustment of injected water to be closer to 131,599 bbls of fresh water injected to date of this report.

Analysis of injection fluid and Brine

Two tests were conducted in 2011 One test conducted on the fresh water via Eunice City water line. The other test is the brine collected out of the well before it traveled to the stock tanks. Cardinal out of Hobbs tested the fluids. Please see attached analysis with this report.

Area of Review (AOR)

To date no new wells have been drilled in a $\frac{1}{4}$ mile radius of the Eunice Brine Well BW – 002 or any other device that penetrates or may penetrate the injection zone.

Loss of Mechanical Integrity

Basis Energy Services LP found the integrity of the casing to be compromised 30 feet from surface. Where the casing was excavated and the casing cut and re fitted with new casing. Excavation was covered up and OCD was notified were a MIT was performed and passed. Please see Subsequence C-103 report and recorded chart.

Deviations from Normal Production Methods

There were no deviations that took place in 2011. Weather so far has held its best with only two freeze ups that required heat tape and more insulation on fresh water lines.

Cavity / Subsidence Information

On request from NM OCD Basic Energy Services LP will conduct sonar to establish a true picture of the cavity between MB 103 and MB 109.

Transfer of Discharge Permit

Pursuant to WQCC 20.6.2.5101.H Basic Energy Services LP will provide written notice of any transfer of the permit. Both parties will sign the notice 30 days to any transfer of ownership, control or possession of the facility with approved discharge permit. The purchaser shall include a written commitment to comply with the terms and conditions of the previously approved discharge permit.

Closure

Basic Energy Services LP will notify OCD when operations of the facility are to be discontinued for a period of six months and will submit a completed C-103 form for plugging and abandonment. Closure and waste disposal shall be in accordance with the statutes, rules and regulations in effect at the time of closure.

Bonding or Financial Assurance

Please call 432.620.5500 Lyn Sockwell for information concerning Basic Energy Services LP Bond or any questions related to the bonding.

Annual Reporting

A cover Sheet has been prepared and displayed in the front. It contains the Basic Energy Services LP as the Operator, the BW-002 as the permit # and API 3 3002526884 for the well in formation file.

David H. Alvarado reporting this report to OCD on December 15, 2011

Summery of Brine Well BW-002 2011

Eunice Brine well has made a great well so far with a production rate of 110 bbls per hour and producing 10 to 10.2 pounds per gal. Dennis W Powers Report on the well was on target many thanks to every ones efforts to keep the well alive and well. Special thanks for the support form Jim Griswold in Santa Fe and Hobbs OCD allowing Basic Energy Services the opportunity to bring in to compliance and we commit to keeping it accordingly. With the demand of Brine increasing with the activity in South Eastern New Mexico Brine is now a commodity and needs to be increased in price per bbl as a premium resource. Basic Energy Services looks forward into 2012 production of brine.

Certification

Basic Energy services LP (Owner / Operator) by the Officer, whose signature appears, below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained here. Basic Energy Services LP further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, Safety and the environment, change the conditions and requirements of this permit administratively.

Conditions Accepted By:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my information those individuals immediately responsible for obtaining the information, I believe that the information in true accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

> Basic Energy Services LP Company Name – Print name Above

> > David H. Alvarado

Company Representative - print name

VIA **Company Representative Signature**

Title: New Mexico Fluid Sales Manager

Date : 12/15/2011









D



Eunice Brine Well # 001 BW - 002

Methodology of Mechanical Testing Surface Lines

Date Tested	Line Name or Number	Method of Testing	Type of Line	Size of Line	API PSI Rating	Tested To
11/16/2011	Line 1 F/W Supply in	Air compressor	2" Poly	2"	200 #	143 #
11/16/2011	Line 3 Discharge to well	Hot Oiler water	2" Steel Std. Pipe	2"	1000 #	380 #
11/16/2011	Line 4 Discharge from annulus	Air compressor	3 " Poly	3"	200 #	125#
11/16/2011	Line 5 Equalizing line tanks	Air compressor	6" Poly	6"	200 #	125#
11/16/2011	Line 6,7,9 Load lines	Air compressor	4" Poly	4"	200 #	135 #
	Beto Gonzales reported that he	will need to find a way oth	ner than a air compressor to test the	lines.		
	His attempt with the Hot oiler hit	extreme pressures instar	ntly on the steel line and was very co	oncerned at attempting	to pressure up the poly	lines.
	Please accept his efforts to test	the lines. The thirty minu	te charts that were run at the pressu	ures recorded are over	the hydrostatic pressur	es and
	line pump pressures also the fre	esh water line pressures for	or the city of Eunice. He is working	on a hand held positive	displacement pump fo	r next year.

F



BASIC ENERGY SERVICES

EUNICE WELL # 1 BRINE STATION BWs - 002 EUNICE NEW MEXICO

	Metered	Metered	9%			Sold	As per billing				
2011	Brine BBLS	Fresh H2O	F/W understated		2010	Brine BBLS	Fresh H2O	2009	BBLS	2008	BBLS
DEC	2,803	2,759			DEC			DEC	4320	DEC	23963
NOV	10,104	11,154			NOV			NOV	9316	NOV	24316
OCT	20,363	22,827			OCT			OCT	9872	OCT	29282
SEP	18,479	14,930			SEP	Shut in	Shut in	SEP	13203	SEP	5600
AUG	8,446	8305			AUG	Shut in	Shut in	AUG	5575	AUG	DOWN
JUL	12,591	10,514			JUL	1790		JUL	10143	JUL	DOWN
JUN	12,124	11,344			JUN	5740		JUN	10840	JUN	DOWN
MAY	12,984	11,997			MAY	18508	4390	MAY	3308	MAY	721
APR	10,067	9,153			APR	10840	3801	APR	13180	APR	2215
MAR	6,431	5,763		- abor dentities and restants	MAR	9111	3856	MAR	7735	MAR	DOWN
FEB	11,501	10,247			FEB	8546	5328	FEB	10055	FEB	5986
JAN	1,740	1,740			JAN	25225	11262	JAN	2923	JAN	10032
	127,633	120,733	10,866 bbis			42882			100470		102115
2007	BBLS	2006		BBLS							
DEC	2600	DEC		16465							
NOV	1080	NOV		5550							
OCT	30	OCT		3580							
SEP	1908	SEP		5490							
AUG	12664	AUG		9590							
JUL	15430	JUL	N	O RECORI	D						
JUN	15278	JUN	N	O RECORI	D						
MAY	11365	MAY	N	O RECORI	D						
APR	10968	APR	N	O RECORI	D						
MAR	4276	MAR	N	O RECORI	D						
FEB	9341	FEB	N	O RECORI	D						
JAN _	23133	JAN	N	O RECORI	D						
	108073			40675							

A. MAXIMUM AND AVARAGE INJECTION PSI 140 avarage - 220 Maximum PSI

		and the second secon	NAMES OF STREET, AND ADDRESS OF STREET, AND ADDRESS OF STREET, ADDRESS OF STREET, ADDRESS OF STREET, ADDRESS OF		
Submit 1 Copy To Appropriate District	State of New M	exico	Form C-103		
Office District I	Energy, Minerals and Natural Resources				
1625 N. French Dr., Hobbs, NM 88240			WELL API NO.		
District II	OIL CONSERVATION	N DIVISION	3002526884		
District III	1220 South St. Fra	ncis Dr	5. Indicate Type of Lease		
1000 Rio Brazos Rd., Aztec, NM 87410	Sonto Eo NM 8	7505	STATE FEE xx		
District IV	Santa Fe, NM o	6. State Oil & Gas Lease No.			
87505					
SUNDRY NOTI	CES AND REPORTS ON WELLS	S	7. Lease Name or Unit Agreement Name		
(DO NOT USE THIS FORM FOR PROPO	SALS TO DRILL OR TO DEEPEN OR PL	LUG BACK TO A			
DIFFERENT RESERVOIR. USE "APPLIC PROPOSALS)	CATION FOR PERMIT" (FORM C-101) F	OR SUCH	Eunice No # 001 BW - 002		
1. Type of Well: Oil Well	Gas Well Other Brine		8. Well Number		
			#1		
2. Name of Operator			9. OGRID Number		
BASiC Energy Services					
3. Address of Operator		10. Pool name or Wildcat			
P.O. Box 10460 Midland 1x. 7970	2		Salado		
4. Well Location					
Unit Letter <u>O:630</u> f	eet from the South line and 24	27_feet from the <u>E</u>	Eastline		
Section 34	Township 21 S Ra	ange 37 E	NMPM County Lea		
	11. Elevation (Show whether DR	R, RKB, RT, GR, etc.,)		
12. Check A	ppropriate Box to Indicate N	Nature of Notice,	Report or Other Data		
			-		
NOTICE OF IN	TENTION TO:	SUB	SEQUENT REPORT OF:		
		REMEDIAL WOR			
		COMMENCE DRI			
PULL OR ALTER CASING		CASING/CEMEN	ТЈОВ 🗌		
OTHER.			Л		
13. Describe proposed or compl	eted operations. (Clearly state all	nertinent details, and	d give pertinent dates, including estimated date		
of starting any proposed wo	rk). SEE RULE 19.15.7.14 NMA $($	C. For Multiple Cor	npletions: Attach wellbore diagram of		
proposed completion or reco	ompletion.				
12/27/2010 Rig up WS unit ND	well head NU BOP & Enviro. Pan	, POH with Tbg. Ta	llied stands @ 1553.16 ft. lay down last three		
joints(bent), RU 7" Scraper and	6 1/8 bit run to 1460 ft, POH with	B/S SDFN			
12/28/2010 RU Gray wire line R	IH with Csg. inspection caliper too	ol showed shoe to be	at 1454 ft. GL. ROH with tool. RIH with		
tool for CBL formation tool and	logged. Took copies to Hobbs OC	D for review. RIH	with /" Arrow st Pkr. set @ 1440 ft. PS1 on		
Usg. to 400 leaked off 60 psi in 2	is min NU to 1 bg. and started pur	iping orine for form	ation with SDFN		
Disease and page 2 for continued a	an art				

Please see page 2 for continued report.

Spud Date:	Rig Release Date:	
I hereby certify that the information about SIGNATURE	ove is true and complete to the best of my know	vledge and belief. /-20-// MGRDATE
Type or print name <u>DAVID ALVARA</u> For State Use Only	DO E-mail address: <u>david.alvarado @basicene</u>	rgyservices.com PHONE: 575.746 2072
APPROVED BY:	TITLE	DATE

APPROVED BY:	TITLE	DATE
Conditions of Approval (if any):		

Page 2

Continued Subsequence C-103 Eunice Brine # 1 BW-002

12/29/2010 Continued pumping Brine for 24 hours 12/30/10 total of 3378 bbls were pumped well holding 320 PSI SD till Monday.

1/3/11 Ran MIT chart on well for over 4 hours showed no loss, Bleed back well to tanks recovered 2500 bbls back in 24 hours. Hobbs OCD was on location at start. Released PSI flowing back to stock tanks

1/4/2011 Continue bleeding well down to 10 PSI RU Kill truck tried to PSI on Csg, to 675 PSI shows slow leak released packer tested out of hole. .SDFN

1/5/2011 RIH with 7" RBP and 7" AD-1 tension packer Set RBP@1440 ft. tested out of hole found leak to be above 30 ft from surface notified OCD about the find. Will make arrangements to excavate and replace bad Csg. under OCD guidance. Called Phoenix Environmental for track hoe. Will not have one available till Friday the 7th if Permit is approved from TX to NM State line. SDFN

1/6/11 TIH with tbg. TOH with tbg laying down, ND Enviro pan and BOP Landed 10' sub in well head and NU well head. RD service unit and moved out of way. Call One Notified on upcoming excavation. SDFN

1/8/11 Excavation down to 15 feet from surface was completed for this day. 1/9/11 Excavation down to 22 feet from surface was completed.

1/10/11 Notified OCD Hobbs of replacement of 7" casing with 7" 24# Hobbs OCD came out to location. Welder made cut off and dressed casing and welded new 7" slip on collar double wrapped casing with black pipe line tape to surface tested casing to 350 psi held for one hour good. Released PSI covered back excavation and re packed pad. SDFN

1/13/11 RU PU w/ four matting boards TIH w/ on and off tool head released RBP @ 1440 ft. TOH with RBP. SDFN

1/14/11 TIH with tbg. tag solid at 1470 work pipe for one hour. TOH with Tbg. closed BOP call for Reverse unit package and 6 1/8 bit with 4 collars.

1/15/11 RU Reverse unit package TIH with 6 1/8 bit 4 collars to 1470 broke circulation and started drilling to 1503 signs of rotted pipe metal on return POH with 4 stands SDFN

1/16/11 TIH to 1503 and drilled to 1540 ft. still cutting on old junk in hole TOH with 4 stands SDFN

1/17/11 TIH with 4 stands and tagged once more @ 1477ft TOH with Bit and TIH with 4 ³/₄ Bit welded to 2 7/8 collar tag at 1477 drilled down to 1498 TOH with 4 stands SDFN.

1/18/11 TIH with 4 stands to 1498 ft. drilled to 1540 ft. ND swivel placed TIW valve on tbg. closed BOP start back flow to stock tanks over night. SDFN Notified OCD Via E-mail.

1/19/11 ND BOP landed tubing added two 10' subs to be at 1540 ft. per tally. Cleaned location ready for production.

Date 1-20-11

J



K







Submit 1 Copy To Appropriate District	State of New Mexico)		Form C-103	
Office District I	Energy, Minerals and Natural F	lesources	(C(O)D)	October 13, 2009	
1625 N. French Dr., Hobbs, NM 88240 District II		WELL APING. 3002526884	Ϋ́ Ι		
1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION DIV	5. Indicate Type of	Lease		
District III 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Francis	Dr.	STATE	FEE xx	
District IV 1220 S. St. Francis Dr. Santa Fe. NM	Santa Fe, INM 87505		6. State Oil & Gas L	Lease No.	
87505					
SUNDRY NOTIO	ES AND REPORTS ON WELLS	ACK TO A	7. Lease Name or U	nit Agreement Name	
DIFFERENT RESERVOIR. USE "APPLIC	ATION FOR PERMIT" (FORM C-101) FOR SU	СН	Eunice No # 001 BW - 002		
PROPOSALS.)	as Well 🗌 Other Brine		8. Well Number		
			#1		
2. Name of Operator BASiC Energy Services			9. OGKID Nulliber		
3. Address of Operator			10. Pool name or W	ildcat	
P.O. Box 10460 Midland Tx. 79702			Salado		
4. Well Location					
Unit Letter <u>O:630</u> fe	et from the <u>South</u> line and <u>2427</u> fee	et from the <u>E</u>	ast_line		
Section 34	Township 21 S Range 2	37 E	NMPM	County Lea	
	11. Elevation (Snow whether DR, RKE	s, RI, GR, elc.)			
12. Check A	ppropriate Box to Indicate Natur	e of Notice, I	Report or Other Da	ata	
	CHANGE PLANS	MMENCE DRI			
		SING/CEMENT	ЈОВ 🗌		
		HFR [.]		П	
13. Describe proposed or complete	ted operations. (Clearly state all pertin	ent details, and	l give pertinent dates,	including estimated date	
of starting any proposed wor	k). SEE RULE 19.15.7.14 NMAC. Fo	r Multiple Con	pletions: Attach well	bore diagram of	
proposed completion or reco	npletion.				
9/27/11 Close well in, hook up pressu	re truck pump needed amount of 10# br	rine to load for	mation not exceeding	400# psi.	
9/28/11 Hook up pressure truck to ann	ulus load formation to OCD required P	SI and shut wa	it for OCD to witness	at 10:00 am start	
recording formation psi with calibrate	d chart recorder for required time per re	egulations of re	quirement.		
				-	
Spud Date:	Rig Release Date:				
I hereby certify that the information at	ove is true and complete to the best of	my knowledge	and belief.		
			DATE 0/01/0011		
SIGNATURE Com AV	IIILE SENM Fluid	a Sales MGR.	DATE <u>9/21/2011</u>		
Type or print name DAVID ALVARA	DO E-mail address: david.alvarado @	basicenergyse	vices.com PHONE:	575.746 2072	
For State Use Only					
ADDROVED DV.	TITLE		DATE		
Conditions of Approval (if any):			DATE		
······································					

Basic Energy Brine Well (API# 30-025-26884) near Eunice, NM

Dennis W . Powers, Ph.D. Consulting Geologist Anthony, TX

November 29, 2010



This report is confidential to Basic Energy Services and may not be used for any other purpose

General Information

Basic Energy Services Eunice Brine Well #001 (API# 30-025-26884) is located 630 ft fsl, 2427 ft fel of section 34, T21S, R37E, in Lea County, NM (Figure 1). This well is being considered for plugging and abandonment (P&A), and this report summarizes background data on the well, estimated geological conditions at the site and surroundings, and proposes a plan for P&A or restoring the well to service.

Geology

Five formations in the vicinity of the Eunice well have been identified and marked on a log cross-section (Figure 2) that crosses the Eunice well location. Near-surface formations of the Dockum Group and the Ogallala are not shown here.

Permian Yates Formation

The Yates is the deepest formation identified here, with upper contact estimated to be approximately as used commonly by industry. The Yates has historically been an enormous producer in the area, and a large proportion of older wells drilled in the area targeted this formation.

Permian Tansill Formation

The Tansill (and Yates) are backreef lagoon and related deposits that are coeval with the upper Capitan reef fringing the Delaware Basin. The Tansill is mainly carbonate and sulfate. It is continuous over large areas, as is the Yates. In this location, it is about 130 ft thick.

Permian Salado Formation

The Salado is the prinicpal salt-bearing unit in the backreef areas. [The Castile Formation underlies the Salado in the Delaware Basin and overlies formations equivalent in age to the Tansill. The Castile is restricted by definition to the Delaware Basin.] The Salado is 1010 ft thick in #37322 and 985 ft thick in 38333. There is a slight trend to thin from west to east. The Salado is estimated to be ~1000 ft thick at the position of the brine well.

The Salado is characterized generally by a high proportion of halite (\sim 85%) and sulfate (\sim 15%) beds. A mineral analysis would be a little different, accounting for the minor compositions.



Figure 1. Location map of five wells in the vicinity of the Eunice brine well (API # 26884) used in a cross-section (Figure 2). Wells show shortened API # (30-025-xxxxx).

The formation is organized in depositional cycles that are a few feet thick and show characteristics of desiccating-upward environments (Holt and Powers, 1990). The typical cycle is caused by initial flooding of the basin that deposits sulfate (anhydrite or gypsum). As time passes, the brine becomes more concentrated and halite is deposited. Eventually the basin dries up more frequently between flooding events, followed by a salt pan with infrequent flooding or rainfall and a brine table below the surface. The cycle ends with a new major flooding period and a new cycle begins.

A characteristic of the Salado is that some of the sulfate beds are thicker because of longer flooding by less evaporated brines. Within the Delaware Basin, 45 of these, mainly those with greatest thickness and lateral continuity) have been numbered from 144 (lowest) to 100 (highest) and are called marker beds (MB). In addition, there are two named similar beds (Union and Cowden Anhydrites). Two upper thicker marker beds in the cross-section (Figure 2) are believed to be equivalent to MB103 (upper) and MB109 (lower). A third MB from the top of Salado is likely to be MB116, but the correlation is less certain.

Another important correlation horizon in the Salado is the Vaca Triste Sandstone Member. In geophysical logs and geologic descriptions of boreholes for potash exploration in the Delaware Basin, this horizon is commonly well described or interpretable. It is widespread in the Permian Basin, and it represents a desiccation surface that was exposed longer than other desiccation surfaces in the formation. It is commonly more clay-rich and thicker than other desiccation surfaces, and it likely has poor tensile strength although it also can show halite cements.

Halite beds in the Salado at the Eunice well are rather pure halite, although geophysical logs indicate some thin interbeds (< 1 ft thick).

Permian Rustler Formation

The Rustler in the Delaware Basin is divided into five formal members, from base to top: Los Medaños, Culebra Dolomite, Tamarisk, Magenta Dolomite, and Forty-niner.

The lithology of Rustler members at Eunice differs somewhat from the sequence in the center of the depositional basin to the west (Powers, 2008). The Los Medaños is thinner and shows some differences from mainly clastic (siltstone, fine sandstone) beds and some halite to more halite. The Culebra Dolomite tends to either not be present or be of different lithology; mainly halite and some sulfate are present in the normal stratigraphic position of the dolomite. With this in mind, the lower Tamarisk may either differ or be in the place of the Culebra. The Magenta tends to be thinner than in the Delaware Basin, and it shows less dolomite (more anhydrite and halite). The Forty-niner is the standard sulfateclastic-sulfate sequence, but thickness differs from the Delaware Basin. A complete core through the Rustler east of Eunice provides good control (Powers, 2008).

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1422 ft length was pulled from the hole, 40 joints of new tubing were run into the hole and the well was put back into production. The date of the work is unspecified.

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Basic Energy Brine Well – Eunice, NM

Figure 2. Geophysical log cross-section from west (left) to east (right) across the location of the Eunice well (#26884). The log of 25479 is a natural gamma - acoustic log combination through the important intervals that is very useful for interpretation of the lithologies. Other logs are mainly natural gamma - neutron, with helpful caliper logs. A tabloid-size version is attached to the end of this report. End logs are part of a regional cross-section (Holt and Powers, 2010).

The annual brine well report, dated 4/22/2010, for the Eunice well provides an undated configuration diagram showing the casing shoe at 1440 ft and 2.875-inch tubing to 1718 ft.

Discussion

The first point of discussion is that the sonar survey results indicate relatively small cavern development and diameter (of the upper cavern) that is <0.10 the depth (\sim 100/1470). This is several times smaller than the empirical relationship developed by Karimi-Jafari et al. (2008) that indicates cratering or sudden failure does not occur when this ratio is less than 0.67. The lower cavern has a smaller diameter (\sim 40 ft) and lower ratio. From this information, it would appear that the Eunice caverns are well below the danger zone.

A second point of discussion is that the cavern volume determined by the sonar survey in 2009 is far less than the apparent volume that would be required to produce the reported brine production from this well. There are three obvious possible explanations of this disparity. The first possibility is that the sonar survey, while it looks appropriate, is incorrect or did not accurately reflect the cavern dimensions in the tested interval. The second is that the

reported production volumes are incorrect. The third is that caverns exist below or above the interval that was tested by the survey. Some combination of any of these possibilities may have occurred.

While the first possibility (inaccurate sonar survey) would provide a simple explanation, it appears unlikely because of the apparent internal consistency of the sonar. While a repeat sonar survey is practical, it is not the first choice to resolve questions about this discrepancy.

Early reported production volumes have some uncertainty (see Griswold email to Alvarodo, dated 6/24/2010). Barring some documentation that provides confidence in limits to production volumes consistent with the cavern sonar volumes, the production volumes are taken to indicate considerable excess of salt removal compared to the sonar cavern volumes. The exact differences are less important, pending resolution of other factors, than the belief that those differences are currently unresolved.

The last possible explanation is most attractive. The well was reported initially to be drilled to 1816 ft, with tubing reportedly placed to a depth of 1700 ft. The cross-section (Figure 2) indicates that the tubing probably was placed below the MB above the Vaca Triste. Between that MB and reported TD (1816 ft), even considering the higher clay content of the Vaca Triste, is a thickness of ~110 ft of halite. Using Griswold's (6/24/2010) estimate that the salt volume from this well is likely to be between 450,000 and 1 million barrels, the diameter of a equivalent cylinder 110 ft high ranges from ~170 to 255 ft. As an alternative, there is a thickness of ~150 ft of halite above MB103 to top of Rustler. The equivalent volume equals a 150-ft high cylinder of~150 to 220 ft diameter.

It seems unlikely that a cavern with a more regular cylinder shape would develop from 1700-1816 ft with tubing at 1700 ft. It is much more likely that a greater-diameter disc-shaped cavern would be created under the MB, similar to the cavern under MB103. A larger diameter cavern is also more likely to have caused strain in the MB and preventing further entry and production.

It also seems unlikely that a major cavern would have developed in the uppermost Salado and Rustler if the casing was actually placed at 1440 ft, as currently has been reported. A casing at 1200 ft, however, would likely have created a much higher cavern. The sonar survey, beginning at 1445 ft, would be consistent with casing to 1440 ft.

Summary and Recommendations

The correlation and interpretation of the Rustler and Salado from west to east across the site of the Eimoce brine well show consistent thicknesses of units, slight general dip to the east, and halite beginning in the Rustler at a depth of ~1235 ft. Bottom of Salado salt is ~2400 ft below ground surface.

Geophysical logs show that several Salado marker beds, consisting mainly of the sulfate mineral anhydrite, are thick and continuous across the section. Thin (<3 ft) anhydrite beds are also present. The Vaca Triste Sandstone Member is also clearly identifiable. Halite beds between these marker beds are of high purity, based on the natural gamma log. Thus abundant salt is available at this location.

A sonar survey of the well conducted in 2009 indicates two main caverns located below the top of the survey at 1445 ft. The lower cavern is roughly 40 ft diameter and 40 ft high, is crudely cylindrical, and is slightly larger diameter at the top. It has a nearly flat upper boundary, most likely because it is developed immediately below MB109, which is less soluble and is expected to

have a nearly planar lower boundary. The upper cavern is more disc-like, with a larger diameter of ~ 100 ft and a height of ~ 10 ft. Like the lower cavern, it has a nearly planar upper boundary, most likely because it is developed immediately below MB103.

There are several discrepancies among reports of the depth of the casing, placement and depth of tubing for production, and depth of the drilling for remedial work. There also is a large discrepancy between the volume of the caverns mapped with sonar in 2009 compared to the estimated salt volume for the reported and estimated total production of this well. Before final recommendations can be made regarding P&A of this well or continued operation, some of these discrepancies need further investigation. The discrepancies may not be resolved with reasonable further work, and the decisions about the well will have to consider this.

The first recommended activity is to confirm the current configuration of tubing and casing in the hole by pulling and tallying the tubing and running geophysical logs or other tools to determine the bottom of casing.

The second activity is to conduct geophysical logging or other means of determining the quality of the the casing-cement-formation bonds from bottom of the casing to the surface. Such a survey is expected to help define whether significant salt adjacent to the casing has been dissolved above the bottom of casing. If the casing only goes to \sim 1200 ft, then there should be no solution of halite behind the casing because there is no known halite above \sim 1235 ft. If the casing extends to 1440 ft, however, there is some potential for higher cavern development.

The casing-cement-formation bond and quality survey will also help determine what further measures, if any, may be required to minimize behind-casing fluid movement or connection for either continued operation or P&A.

If the casing extends to 1440 ft and casingcement-formation bonds all appear very good or requiring minimal remedial work, it may be practical to recommend additional production from this well before closure. That production should be focused on the interval above MB109 and below the cavern at the base of MB103 by locating the tubing base near the top of MB109. An appropriate depth would be ~1540 ft, based on the sonar survey. A previous tubing depth report as 1565 ft likely extended into MB109, forcing fresh water into the interval below MB109.

In the event that the cement-formation bond is so poor that cavern development may have occurred within the Rustler, the best option is probably to P&A. In addition, if the casingcement-formation bonds appear generally good, with some remedial zones, the remedial action (probably perforating and squeezing cement) must be monitored to determine that a seal was obtained and that cavern development behind the casing was not connected during the squeeze. This will be readily apparent from the pressure monitoring.

There is little likelihood that the well can be rescued with cavern development behind the casing. The dimensions will be unknown, and there is little likelihood of cutting casing and dropping it into the cavern for ready access and accurate cavern survey.

The highest possibility of continuing operation of this well requires the following conditions:

- 1. good determination of the current well configuration,
- 2. good results for the casing-cement-formation bond log,
- 3. no cavern development indicated behind a casing to 1440 ft or finding that the casing shoe is at 1200 ft; rerun sonar in that case,

- acceptance that the discrepancy between current sonar-based cavern volumes and salt volume for total estimated brine production is reasonably accounted for by production below ~1700 ft and, if found, production from the Rustler,
- 5. no further evidence is found that the diameter of any salt cavern is near or exceeds the ratio of 0.67 (diameter to depth), and
- 6. a clear plan of limited operation and monitoring is presented and acceptable.

A bare bones plan for item #6 could include reconfiguring the tubing to attempt further development above MB109 and below the upper known cavern combined with a plan for regular (annual?) resurvey by sonar to determine if the solution is proceeding near the base of the tubing or increasing the diameter of the upper cavern. The size of the upper cavern likely precludes development of a "blanket" that could force solution deeper, at least at any reasonable cost.

The activities to determine well configuration, including depth of casing and quality of the casing-cement-formation bonds are appropriate regardless of further activities in the well. For either P&A or proposals to continue operating the well, these are necessary. An inner casing cemented back to surface may be required, depending on any other suitable remedial action for the current casing, for the well to be put back into service.

Other activities may be appropriate to consider as a prelude to P&A. While re-entering the well, a temperature survey, at least to 1667 ft, should be conducted. In addition, the standard source of injection water should have some temperature measurements for comparison.

One of the major concerns in abandoning brine caverns is the expansion of the brine over a period of time as it equilibrates from a (usually) lower temperature injection water to

the (usually) higher temperature regime within the salt column. For larger caverns and greater differential temperatures, the period could take tens of years. For smaller caverns such as this, the period could be smaller. Creep within the salt beds and higher fluid pressures within the halite (~lithostatic) can also contribute to increasing fluid pressure with time. The weakest part of the system is commonly the cement-casing-cement system of the plug, and it will be subjected to pressures that will increase with time, as this part of the system may also degrade. It has been recommended in some situations that the well system not be P&A until after this initial pulse of brine expansion has passed. An open well, monitored over time to determine the decrease in pressure buildup may provide a better opportunity for P&A in the near future (in this case).

References Cited

- Holt, R.M, and Powers, D.W., 1990, Halite sequences within the Late Permian Salado Formation in the vicinity of the Waste Isolation Pilot Plant, *in* Powers, D.W., Holt, R.M., Beauheim, R.L., and Rempe, N., eds., 1990, Geological and Hydrological Studies of Evaporites in the Northern Delaware Basin for the Waste Isolation Pilot Plant (WIPP): Guidebook 14, Geological Society of America (Dallas Geological Society), p. 45-78.
- Holt, R.M., and Powers, D.W., 2010, Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, TX: Geological Society of America Bulletin, v. 122, DOI: 10.1130/ B30052.1.
- Powers, D.W., 2008, Basic geology of exploratory drillhole CP-975, section 33, T21S, R38E, Lea County, NM: report for Waste Control Specialists LLC, Andrews, TX (July).
- Powers, D.W., and Holt, R.M., 2000, The salt that wasn't there: mudflat facies equivalents to halite of the Permian Rustler Formation, southeastern New Mexico: Journal of Sedimentary Research, v. 70, no. 1, p. 29-36.





Analytical Results For:

BASIC FLUID SALES (1307) P. O. BOX 1375 ARTESIA NM, 88211		Project Nur Project Man Fa	2	Reported: 28-Dec-11 19:17					
		FRE	SH WAT	ER					
F		H1027	12-01 (Wa	ter)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardin	al Laborat	ories					
Inorganic Compounds									
Alkalinity, Bicarbonate	166	5.00	mg/L	I	1120105	НМ	27-Dec-11	310.1M	
Calcium	80.3	1.00	mg/L	1	1122806	JM	22-Dec-11	200.7	GAL
Alkalinity, Carbonate	ND	0.00	mg/L	1	1120105	HM	27-Dec-11	310.1M	
Chloride	64.0	4.00	mg/L	1	1122102	HM	27-Dec-11	4500-CI-B	
Conductivity	654	1.00	uS/cm	1	1122807	HM	21-Dec-11	120.1	
Magnesium	13.2	1.00	mg/L	1	1122806	JM	22-Dec-11	200.7	GAL
pН	7.60	0.100	pH Units	1	1122807	HM	21-Dec-11	150.1	
Potassium	2.73	1.00	mg/L	1	1122806	JM	22-Dec-11	200.7	GAL
Sodium	52.8	1.00	mg/L	1	1122806	JM	22-Dec-11	200.7	GAL
Sulfate	68.8	10.0	mg/L	1	1122709	HM	27-Dec-11	375.4	
TDS	418	5.00	mg/L	1	1122108	HM	21-Dec-11	160.1	
Alkalinity, Total	136	4.00	mg/L	1	1120105	HM	27-Dec-11	310.1M	

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

BASIC FLUID SALES (130 P. O. BOX 1375 ARTESIA NM, 88211)7)	Project: EUNICE #1 Project Number: NONE GIVEN Project Manager: DAVID ALVARADO Fax To: (575) 746-2435					Reported: 28-Dec-11 19:17		
		BRIN	NE WAT	ER ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardina	al Labora	tories					
Inorganic Compounds									
Alkalinity, Bicarbonate	171	5.00	mg/L	1	1120105	HM	27-Dec-11	310.1M	
Calcium	1150	200	mg/L	200	1122806	JM	22-Dec-11	200.7	GAL
Alkalinity, Carbonate	ND	0.00	mg/L	1	1120105	HM	27-Dec-11	310.1M	
Chloride	184000	4.00	mg/L	1	1122102	HM	27-Dec-11	4500-Ci-B	
Conductivity	586000	1.00	uS/cm	1	1122807	HM	21-Dec-11	120.1	
Magnesium	2670	200	mg/L	200	1122806	JM	22-Dec-11	200.7	GAL
pH	6.78	0.100	pH Units	1	1122807	HM	21-Dec-11	150.1	
Potassium	1550	200	mg/L	200	1122806	JM	22-Dec-11	200.7	GAL
Sodium	113000	200	mg/L	200	1122806	JM	22-Dec-11	200.7	GAL
Sulfate	5440	10.0	mg/L	1	1122709	HM	27-Dec-11	375.4	
TDS	332000	5.00	mg/L	1	1122712	HM	21-Dec-11	160.1	
Alkalinity, Total	140	4.00	mg/L	1	1120105	HM	27-Dec-11	310.1M	

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Celey D. Kune

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Basic Energy Brine Well (API# 30-025-26884) near Eunice, NM

Dennis W . Powers, Ph.D. Consulting Geologist Anthony, TX

November 29, 2010



This report is confidential to Basic Energy Services and may not be used for any other purpose

General Information

Basic Energy Services Eunice Brine Well #001 (API# 30-025-26884) is located 630 ft fsl, 2427 ft fel of section 34, T21S, R37E, in Lea County, NM (Figure 1). This well is being considered for plugging and abandonment (P&A), and this report summarizes background data on the well, estimated geological conditions at the site and surroundings, and proposes a plan for P&A or restoring the well to service.

Geology

Five formations in the vicinity of the Eunice well have been identified and marked on a log cross-section (Figure 2) that crosses the Eunice well location. Near-surface formations of the Dockum Group and the Ogallala are not shown here.

Permian Yates Formation

The Yates is the deepest formation identified here, with upper contact estimated to be approximately as used commonly by industry. The Yates has historically been an enormous producer in the area, and a large proportion of older wells drilled in the area targeted this formation.

Permian Tansill Formation

The Tansill (and Yates) are backreef lagoon and related deposits that are coeval with the upper Capitan reef fringing the Delaware Basin. The Tansill is mainly carbonate and sulfate. It is continuous over large areas, as is the Yates. In this location, it is about 130 ft thick.

Permian Salado Formation

The Salado is the prinicpal salt-bearing unit in the backreef areas. [The Castile Formation underlies the Salado in the Delaware Basin and overlies formations equivalent in age to the Tansill. The Castile is restricted by definition to the Delaware Basin.] The Salado is 1010 ft thick in #37322 and 985 ft thick in 38333. There is a slight trend to thin from west to east. The Salado is estimated to be ~1000 ft thick at the position of the brine well.

The Salado is characterized generally by a high proportion of halite (\sim 85%) and sulfate (\sim 15%) beds. A mineral analysis would be a little different, accounting for the minor compositions.



Figure 1. Location map of five wells in the vicinity of the Eunice brine well (API # 26884) used in a cross-section (Figure 2). Wells show shortened API # (30-025-xxxx).

The formation is organized in depositional cycles that are a few feet thick and show characteristics of desiccating-upward environments (Holt and Powers, 1990). The typical cycle is caused by initial flooding of the basin that deposits sulfate (anhydrite or gypsum). As time passes, the brine becomes more concentrated and halite is deposited. Eventually the basin dries up more frequently between flooding events, followed by a salt pan with infrequent flooding or rainfall and a brine table below the surface. The cycle ends with a new major flooding period and a new cycle begins.

A characteristic of the Salado is that some of the sulfate beds are thicker because of longer flooding by less evaporated brines. Within the Delaware Basin, 45 of these, mainly those with greatest thickness and lateral continuity) have been numbered from 144 (lowest) to 100 (highest) and are called marker beds (MB). In addition, there are two named similar beds (Union and Cowden Anhydrites). Two upper thicker marker beds in the cross-section (Figure 2) are believed to be equivalent to MB103 (upper) and MB109 (lower). A third MB from the top of Salado is likely to be MB116, but the correlation is less certain.

Another important correlation horizon in the Salado is the Vaca Triste Sandstone Member. In geophysical logs and geologic descriptions of boreholes for potash exploration in the Delaware Basin, this horizon is commonly well described or interpretable. It is widespread in the Permian Basin, and it represents a desiccation surface that was exposed longer than other desiccation surfaces in the formation. It is commonly more clay-rich and thicker than other desiccation surfaces, and it likely has poor tensile strength although it also can show halite cements.

Halite beds in the Salado at the Eunice well are rather pure halite, although geophysical logs indicate some thin interbeds (< 1 ft thick).

Permian Rustler Formation

The Rustler in the Delaware Basin is divided into five formal members, from base to top: Los Medaños, Culebra Dolomite, Tamarisk, Magenta Dolomite, and Forty-niner.

The lithology of Rustler members at Eunice differs somewhat from the sequence in the center of the depositional basin to the west (Powers, 2008). The Los Medaños is thinner and shows some differences from mainly clastic (siltstone, fine sandstone) beds and some halite to more halite. The Culebra Dolomite tends to either not be present or be of different lithology; mainly halite and some sulfate are present in the normal stratigraphic position of the dolomite. With this in mind, the lower Tamarisk may either differ or be in the place of the Culebra. The Magenta tends to be thinner than in the Delaware Basin, and it shows less dolomite (more anhydrite and halite). The Forty-niner is the standard sulfateclastic-sulfate sequence, but thickness differs from the Delaware Basin. A complete core through the Rustler east of Eunice provides good control (Powers, 2008).

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Basic Energy Brine Well – Eunice, NM

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The annual brine well report, dated 4/22/2010, for the Eunice well provides an undated configuration diagram showing the casing shoe at 1440 ft and 2.875-inch tubing to 1718 ft.

Discussion

The first point of discussion is that the sonar survey results indicate relatively small cavern development and diameter (of the upper cavern) that is <0.10 the depth (\sim 100/1470). This is several times smaller than the empirical relationship developed by Karimi-Jafari et al. (2008) that indicates cratering or sudden failure does not occur when this ratio is less than 0.67.

The lower cavern has a smaller diameter (\sim 40 ft) and lower ratio. From this information, it would appear that the Eunice caverns are well below the danger zone.

A second point of discussion is that the cavern volume determined by the sonar survey in 2009 is far less than the apparent volume that would be required to produce the reported brine production from this well. There are three obvious possible explanations of this disparity. The first possibility is that the sonar survey, while it looks appropriate, is incorrect or did not accurately reflect the cavern dimensions in the tested interval. The second is that the

Basic Energy Brine Well – Eunice, NM

reported production volumes are incorrect. The third is that caverns exist below or above the interval that was tested by the survey. Some combination of any of these possibilities may have occurred.

While the first possibility (inaccurate sonar survey) would provide a simple explanation, it appears unlikely because of the apparent internal consistency of the sonar. While a repeat sonar survey is practical, it is not the first choice to resolve questions about this discrepancy.

Early reported production volumes have some uncertainty (see Griswold email to Alvarodo, dated 6/24/2010). Barring some documentation that provides confidence in limits to production volumes consistent with the cavern sonar volumes, the production volumes are taken to indicate considerable excess of salt removal compared to the sonar cavern volumes. The exact differences are less important, pending resolution of other factors, than the belief that those differences are currently unresolved.

The last possible explanation is most attractive. The well was reported initially to be drilled to 1816 ft, with tubing reportedly placed to a depth of 1700 ft. The cross-section (Figure 2) indicates that the tubing probably was placed below the MB above the Vaca Triste. Between that MB and reported TD (1816 ft), even considering the higher clay content of the Vaca Triste, is a thickness of ~110 ft of halite. Using Griswold's (6/24/2010) estimate that the salt volume from this well is likely to be between 450,000 and 1 million barrels, the diameter of a equivalent cylinder 110 ft high ranges from ~170 to 255 ft. As an alternative, there is a thickness of ~150 ft of halite above MB103 to top of Rustler. The equivalent volume equals a 150-ft high cylinder of ~150 to 220 ft diameter.

It seems unlikely that a cavern with a more regular cylinder shape would develop from 1700-1816 ft with tubing at 1700 ft. It is much more likely that a greater-diameter disc-shaped cavern would be created under the MB, similar to the cavern under MB103. A larger diameter cavern is also more likely to have caused strain in the MB and preventing further entry and production.

It also seems unlikely that a major cavern would have developed in the uppermost Salado and Rustler if the casing was actually placed at 1440 ft, as currently has been reported. A casing at 1200 ft, however, would likely have created a much higher cavern. The sonar survey, beginning at 1445 ft, would be consistent with casing to 1440 ft.

Summary and Recommendations

The correlation and interpretation of the Rustler and Salado from west to east across the site of the Eimoce brine well show consistent thicknesses of units, slight general dip to the east, and halite beginning in the Rustler at a depth of \sim 1235 ft. Bottom of Salado salt is \sim 2400 ft below ground surface.

Geophysical logs show that several Salado marker beds, consisting mainly of the sulfate mineral anhydrite, are thick and continuous across the section. Thin (<3 ft) anhydrite beds are also present. The Vaca Triste Sandstone Member is also clearly identifiable. Halite beds between these marker beds are of high purity, based on the natural gamma log. Thus abundant salt is available at this location.

A sonar survey of the well conducted in 2009 indicates two main caverns located below the top of the survey at 1445 ft. The lower cavern is roughly 40 ft diameter and 40 ft high, is crudely cylindrical, and is slightly larger diameter at the top. It has a nearly flat upper boundary, most likely because it is developed immediately below MB109, which is less soluble and is expected to have a nearly planar lower boundary. The upper cavern is more disc-like, with a larger diameter of ~ 100 ft and a height of ~ 10 ft. Like the lower cavern, it has a nearly planar upper boundary, most likely because it is developed immediately below MB103.

There are several discrepancies among reports of the depth of the casing, placement and depth of tubing for production, and depth of the drilling for remedial work. There also is a large discrepancy between the volume of the caverns mapped with sonar in 2009 compared to the estimated salt volume for the reported and estimated total production of this well. Before final recommendations can be made regarding P&A of this well or continued operation, some of these discrepancies need further investigation. The discrepancies may not be resolved with reasonable further work, and the decisions about the well will have to consider this.

The first recommended activity is to confirm the current configuration of tubing and casing in the hole by pulling and tallying the tubing and running geophysical logs or other tools to determine the bottom of casing.

The second activity is to conduct geophysical logging or other means of determining the quality of the the casing-cement-formation bonds from bottom of the casing to the surface. Such a survey is expected to help define whether significant salt adjacent to the casing has been dissolved above the bottom of casing. If the casing only goes to \sim 1200 ft, then there should be no solution of halite behind the casing because there is no known halite above \sim 1235 ft. If the casing extends to 1440 ft, however, there is some potential for higher cavern development.

The casing-cement-formation bond and quality survey will also help determine what further measures, if any, may be required to minimize behind-casing fluid movement or connection for either continued operation or P&A.

If the casing extends to 1440 ft and casingcement-formation bonds all appear very good or requiring minimal remedial work, it may be practical to recommend additional production from this well before closure. That production should be focused on the interval above MB109 and below the cavern at the base of MB103 by locating the tubing base near the top of MB109. An appropriate depth would be ~1540 ft, based on the sonar survey. A previous tubing depth report as 1565 ft likely extended into MB109, forcing fresh water into the interval below MB109.

In the event that the cement-formation bond is so poor that cavern development may have occurred within the Rustler, the best option is probably to P&A. In addition, if the casingcement-formation bonds appear generally good, with some remedial zones, the remedial action (probably perforating and squeezing cement) must be monitored to determine that a seal was obtained and that cavern development behind the casing was not connected during the squeeze. This will be readily apparent from the pressure monitoring.

There is little likelihood that the well can be rescued with cavern development behind the casing. The dimensions will be unknown, and there is little likelihood of cutting casing and dropping it into the cavern for ready access and accurate cavern survey.

The highest possibility of continuing operation of this well requires the following conditions:

- 1. good determination of the current well configuration,
- 2. good results for the casing-cement-formation bond log,
- 3. no cavern development indicated behind a casing to 1440 ft or finding that the casing shoe is at 1200 ft; rerun sonar in that case,

- acceptance that the discrepancy between current sonar-based cavern volumes and salt volume for total estimated brine production is reasonably accounted for by production below ~1700 ft and, if found, production from the Rustler,
- 5. no further evidence is found that the diameter of any salt cavern is near or exceeds the ratio of 0.67 (diameter to depth), and
- 6. a clear plan of limited operation and monitoring is presented and acceptable.

A bare bones plan for item #6 could include reconfiguring the tubing to attempt further development above MB109 and below the upper known cavern combined with a plan for regular (annual?) resurvey by sonar to determine if the solution is proceeding near the base of the tubing or increasing the diameter of the upper cavern. The size of the upper cavern likely precludes development of a "blanket" that could force solution deeper, at least at any reasonable cost.

The activities to determine well configuration, including depth of casing and quality of the casing-cement-formation bonds are appropriate regardless of further activities in the well. For either P&A or proposals to continue operating the well, these are necessary. An inner casing cemented back to surface may be required, depending on any other suitable remedial action for the current casing, for the well to be put back into service.

Other activities may be appropriate to consider as a prelude to P&A. While re-entering the well, a temperature survey, at least to 1667 ft, should be conducted. In addition, the standard source of injection water should have some temperature measurements for comparison.

One of the major concerns in abandoning brine caverns is the expansion of the brine over a period of time as it equilibrates from a (usually) lower temperature injection water to

the (usually) higher temperature regime within the salt column. For larger caverns and greater differential temperatures, the period could take tens of years. For smaller caverns such as this, the period could be smaller. Creep within the salt beds and higher fluid pressures within the halite (~lithostatic) can also contribute to increasing fluid pressure with time. The weakest part of the system is commonly the cement-casing-cement system of the plug, and it will be subjected to pressures that will increase with time, as this part of the system may also degrade. It has been recommended in some situations that the well system not be P&A until after this initial pulse of brine expansion has passed. An open well, monitored over time to determine the decrease in pressure buildup may provide a better opportunity for P&A in the near future (in this case).

References Cited

- Holt, R.M., and Powers, D.W., 1990, Halite sequences within the Late Permian Salado Formation in the vicinity of the Waste Isolation Pilot Plant, *in* Powers, D.W., Holt, R.M., Beauheim, R.L., and Rempe, N., eds., 1990, Geological and Hydrological Studies of Evaporites in the Northern Delaware Basin for the Waste Isolation Pilot Plant (WIPP): Guidebook 14, Geological Society of America (Dallas Geological Society), p. 45-78.
- Holt, R.M., and Powers, D.W., 2010, Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, TX: Geological Society of America Bulletin, v. 122, DOI: 10.1130/ B30052.1.
- Powers, D.W., 2008, Basic geology of exploratory drillhole CP-975, section 33, T21S, R38E, Lea County, NM: report for Waste Control Specialists LLC, Andrews, TX (July).
- Powers, D.W., and Holt, R.M., 2000, The salt that wasn't there: mudflat facies equivalents to halite of the Permian Rustler Formation, southeastern New Mexico: Journal of Sedimentary Research, v. 70, no. 1, p. 29-36.



ANNUAL BRINE WELL REPORT

BASIC ENERGY SERVICES L.P. EUNICE BRINE WELL # 001 BW - 002 API # 3002526884 SEPTEMBER 30, 2010

DAVID ALVARADO

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Payment of Discharge Plan Discharge Fees

1. BASiC Energy Services has paid all known fee's needed to pursue it's Class III Brine well BW - 002 Eunice Brine well # 001

Permit Expiration and Renewal

2. Pursuant to Regulation 20.6.2.3109 NMAC BASiC Energy Services Permit will expire on January 6, 2014 renewal will be submitted no latter than 120 days before expiration date.

Permit Terms and Conditions

3. Pursuant to WQCC Regulation 20.6.2.3104 BASiC Energy Services will ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition will apply the rules and regulations administered by OCD pursuant to the Oil and Gas act, NMSA 1978, section 70-2-1- through 70-2-38

Owner / Operator Commitments

4. BASiC Energy Services will abide by all commitments submitted in the discharge permit any attachments and subsequent amendments or condition for approval.

Modifications

5. No Modifications have taken place on the Eunice Brine #001 from January 2010 thru August 28, 2010

Waste Disposal and Storage

6. The Eunice Brine has had zero wastes that need to be hauled to CRI from January 2010 to August 28, 2010 if to be plugged all remedial with any cleaning of soil will be taken to the proper place by Phoenix Environmental.

Drum Storage

7. All drums will be contained with an impermeable containment any drum that might be needed to be stored will contain the bungs and will be placed on a horizontal plane.

Process, Maintenance and Yard Areas

8. The discharge lines at BW- 002 do not have loading pads with curbs. Each load line has a collection device incorporated into the design to contain contaminants from release, leaks and spills from reaching the ground surface.

Above Ground Tanks

9. BASiC Energy Services has placed a twenty mill plastic liner underneath the tanks and over lap the berm that incubuses the facility brine water tanks. It contains a volume of one and a half times the amount total volume. The fresh water tank also is contained and will hold one and a half times the amount of total volume.

Labeling

10. All tanks are marked with black stenciled wording as to their contents.

Below – Grade Tanks / Sumps and Pits / ponds

11. A. The Eunice Brine station does not have any below grade tanks, sumps, pits, or ponds.

11. B. No modifications needed to be reported not applicable.

11. C. Location and battery is rendered nonhazardous to wildlife, including migratory birds

11 D. Inspection of the system's interring connecting tank lines have been tested and are in good standing.

Underground Process / Wastewater Lines

11. A. The facility's production line that is connected to the annulus and leads to the filling of the production tanks are scheduled to be tested in October 2010.

12. B. Please see Schematic diagram.

Please see Exhibit A

Class V Wells

13. Will not apply to this Facility

Housekeeping

14. Daily inspection and visual inspection is done and recorded in daily logs of the pumper taking care of the facility.

Spill Reporting

15. No discharge or spills, leaks and released have occurred at the facility that Would require action pursuant to WQCC Regulation 20.5.12.1203 NMAC and OCD Rule 116(19.15.3.116 NMAC).

OCD Inspections

16. No known conditions have been required on the facility or citations from BLM or OCD.

Storm Water

17. A SPCC plan is to be done before the end of the year it will be assigned to a third party as per Lyn Sockwell Director of Environmental.

Unauthorized Discharge

18. BASiC Energy Services will abide to the WQCC standards listed in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Interstate Streams) no known streams exist in the area of the BW-002.

Vadose Zone and Water Pollution

19. BASiC Energy Services will address and investigate and report to OCD any Discharge pursuant to WQCC 20.6.2.4000 NMAC and will remediate, abate, and submit subsequent reports.

Additional Site Specific Conditions

20. Because of the site specific conditions asked on the Owen # 2 and the Owen # 4 it is not cost efficient to re enter one that is plugged and the other abandoned. At this time no C-103 reports of the Salado were found in records. Dennis Powers will be reporting to Basic and also OCD with his finding on cross section studies we hope to have his results by October 15th 2010.

Brine well Identification, Operation, Monitoring, Bonding and Reporting.

21 A.

Well Identification Eunice Brine # 1 (BW – 002) API 3002526884 O-Sec 34- T 21S – R 37E

Well Work over Operations

21 B No well work over have taken place down hole in 2010. A copy of the well bore diagram can be seen.

Please see Exhibit F

21 B Intent to Plug was done and a C-103 with the closed loop was completed and a copy was handed to Jim Griswold on the meeting of August 10, 2010Dennis Powers would be hired and a study of the cross section with a plugging procedure would be submitted by Dennis Powers.

Production Method

21. C. Fresh water is being injected down the tubing and production of brine up the casing to where a line is entering our brine water stock tanks. Please see Exhibit B

Well Pressure Limits

21 D. The Maximum operating surface pressure of 450 psig on the BW- 002 has never been recorded at present the highest psig is at an average of 220 psig in 2010.

Mechanical Integrity Testing

21 E. On September 24, 2010 a kill truck was tied on to the wells tubing and started pumping at a rate of 2 .5 bbl per minute after 300 bbls pumped the casing pressure came up to 120 Psig at around 600 bbls pumped at 2 .5 bbls per minute pressure came up to 180# Psig. The Rate of fresh water was increased to 3 bbls per minute and the well annulus showed 180 # Psig continued to pump at this rate 400 bbls more and the pressure never increased it stayed at 180 Psi. Well was shut in and data recorded. Dennis Powers will be working on the cross section in this area and data given to him for review. At this time we will not be able to run a chart on the cavern due to the loss of pressure in 3 hours and the ability to get up the formation to 300 will not work.

Testing Schedule

Will schedule testing if well is placed back in operating condition.

21 F. Capacity / Cavity Configuration and Subsidence Survey
 At this time all we have on record is the Sonar that was done in 2009.
 Dennis Powers was hired to prove the dome of the cavern
 We are still waiting for his findings and his report to
 OCD Santa Fe and Our Office.

Production / Injection Volumes

21 G. The report will show Brine that was produced and the fresh water that was injected from January thru June for 2010. A total of 42,882 bbls was produced and sold at the Eunice # 1 BW – 002 and a total of 38,615 bbls were recorded by City of Eunice as sold to the facility. It was shortly closed in due to the inability to prove the dome and the two off set wells as requested by OCD on the Owen # 2 and the Owen # 3

Please see Exhibit C

Analysis of Injection Fluid and Brine

21 H. Two tests have been done for brine and fresh water this year. Please see Exhibit D

Area of Review (AOR)

21 I. To date 9/29/10 no new wells have been drilled with in a ¼ mile of the Eunice Brine Well BW- 002 or any other devices that penetrates or may penetrate the injection zone.

Loss of Mechanical Integrity

21 J. Basic Energy Services as the operator has no discovery of any failures to the casing or tubing also there are no movements of fluids outside of the injection zone and will notify OCD and cease operation to receive approval to restart injection operations.

Bonding or Financial Assurance

Please call 432.620.5500 21 K. Lyn Sockwell for information about BASiC Energy Services Bonds or any questions related to our bonds.

Annual Report

21 L 1. A cover sheet has been prepared and displayed in the front.
It contains the BASiC Energy Services as the Operator, The BW-002 as the permit # and API # 3002526884 for the well information file.
David Alvarado reporting this report to OCD.

Summery of Brine well BW-002 2010

21 L 2. Production was great as we started the year of 2010 there were no problems as we came out of winter. Because of the notice to remediate the two wells that off set the BW- 002 research showed that the cost would not be worth the effort due to the history of each well and the in ability to prove the dome of the well at this point it was decided that the well should be plugged and abandoned. A C-103 with a closed loop form was done and was handed to OCD Santa Fe to review after a meeting was scheduled and held with Jim Griswold, Carlos Chavez. At the meeting it was agreed that Dennis Powers be hired to work on the cross section of the area to help verify the stability of the brine well. Phoenix Environmental was hired to assess and take samples to remediate the location of the brine well. Chevron was notified of our intentions for P& A the well also.

Please see Exhibit E

Production Volumes

21 L 3 Please refer to 21 G for running total volumes with the maximum and average injection pressures. As explained in the 2009 report the ability to track total volumes back in history due to change of Management was hard due to the lack of data that was recorded. Please see Exhibit C

Chemical Analysis

21 L 4 A copy of BW-002 can be found as required in 21 H Please see Exhibit D

Mechanical Integrity Testing

22 21 L 5. On September 24, 2010 a kill truck was tied on to the wells tubing and started pumping at a rate of 2 .5 bbl per minute after 300 bbls pumped the casing pressure came up to 120 Psig at around 600 bbls pumped at 2 .5 bbls per minute pressure came up to 180# Psig. The Rate of fresh water was increased to 3 bbls per minute and the well annulus showed 180 # Psig continued to pump at this rate 400 bbls more and the pressure never increased it stayed at 180 Psi. Well was shut in and data recorded. Dennis Powers will be working on the cross section in this area and data given to him for review. At this time we will not be able to run a chart on the cavern due to the loss of pressure in 3 hours and the ability to get up the formation to 300 will not work.

Deviations from Normal Production Methods

21 L 6 It was ordered by VP's that the Eunice Brine # 1 BW – 002 was to be shut in and a C-103 for plugging be written the pump was disconnected and removed from the premises to keep any one from producing brine for sale. Our meeting with OCD in Santa Fe on August 10th with the discussion we agreed to have Dennis Power look in to the stability of the cavern. Dennis will have his report to us and also a written procedure to plug the well for the OCD office to review.

Leaks Spill Reports

21 L 7 No Leaks or spills have taken place in 2010.

Ground Water Monitoring

21 L 8 MIT not applicable at this time. Recorded test shows last tested in 2009.

Cavity / Subsidence Information

21 L 9 Please refer to 21 F

AOR

21 L10 No new wells or any cross digging has occurred that we are aware of in 2010.

Sign Off requirements WQCC Subsection G 20.6.2.5101

21 L 11 Can be found on page 12

Transfer of Discharge Permit

22. Pursuant to WQCC 20.6.2.5101.H Basic Energy will provide written notice of any transfer of the permit. Both parties will sign the notice 30 days to any transfer of ownership, control or possession of the facility with approved discharge permit. The purchaser shall include a written commitment to comply with the terms and conditions of the previously approved discharge permit.

Closure

23. Basic Energy services will notify OCD when Operations of the facility are to be discontinued for a period of six months and will submit a completed C-1-3 form for plugging and abandonment. Closure and waste disposal shall be in accordance with the statutes, rules and regulations in effect at the time of closure.

Certification

BASiC Energy Services, L. P. (Owner / Operator), by the officer, whose signature appears, below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained here. BASiC Energy Services L.P. further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively.

Conditions accepted by:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information in true accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

> <u>BASiC Energy Services L.P.</u> Company Name – print name Above

<u>David H. Alvarado</u> Company Representative – print name

Company Representative – signature

Title <u>New Mexico Fluid Sales Manager</u>

Date <u>9/30/2010</u>





EXHIBIT B

BASIC ENERGY SERVICES

EUNICE WELL # 1 BRINE STATION BWs - 002 EUNICE NEW MEXICO

	Sold	As per billing						
2010	Brine BBLS	Fresh H2O	2009	BBLS	2008	BBLS	2007	BBLS
DEC			DEC	4320	DEC	23963	DEC	2600
NOV			NOV	9316	NOV	24316	NOV	1080
ост			ост	9872	ост	29282	ОСТ	30
SEP	Shut in	Shut in	SEP	13203	SEP	5600	SEP	1908
AUG	Shut in	Shut in	AUG	5575	AUG	DOWN	AUG	12664
JUL	1790	1266	JUL	10143	JUL	DOWN	JUL	15430
JUN	5740	8712	JUN	10840	JUN	DOWN	JUN	15278
MAY	18508	4390	MAY	3308	MAY	721	MAY	11365
APR	10840	3801	APR	13180	APR	2215	APR	10968
MAR	9111	3856	MAR	7735	MAR	DOWN	MAR	4276
FEB	8546	5328	FEB	10055	FEB	5986	FEB	9341
JAN	25225	11262	JAN	2923	JAN	10032	JAN	23133
	42882	38615		100470		102115		108073

2006	BBLS
DEC	16465
NOV	5550
ОСТ	3580
SEP	5490
AUG	9590
JUL	NO RECORD
JUN	NO RECORD
MAY	NO RECORD
APR	NO RECORD
MAR	NO RECORD
FEB	NO RECORD
JAN	NO RECORD
	40675

A. MAXIMUM AND AVARAGE INJECTION PSI

220 psi

Analytical Laboratory Report for:

22 **BJ Chemical Services** Account Representative: Jeremy Spears

09/20/2010

Basic Energy Services

Partial Water Analysis

Listed below please find water analysis report from: Basic Eunice Brine, Sta #1 Fresh

Lab Test No:

2010145367

Sample Date:

Cations: mg/L as: Calcium 80.00 (Ca^{**}) Magnesium 12.00 (Mg^{**}) Sodium 44 (Na^{*}) Iron 0.74 (Fe^{**}) Potassium 2.5 (K^{*}) Barium 6.60 (Ba⁺⁺) 0.63 Strontium (Sr⁺⁺) Manganese 0.02 (Mn⁺⁺) Anions: mg/L as: Sulfate 46 (SO,) Chloride 116 (CI) Gases: **Carbon Dioxide** (CO_) Hydrogen Sulfide (H,S)

Analytical Laboratory Report for:

BJ Chemical Services Account Representative: Jeremy Spears

09/20/2010

Basic Energy Services

Partial Water Analysis

Listed below please find water analysis report from: Basic Eunice, Sta Fresh #2

Lab Test No:

2010145368

Sample Date:

Cations:	mg/L	as:	
Calcium	79.00	(Ca ⁺⁺)	
Magnesium	12.00	(Mg ^{**})	
Sodium	40	(Na [⁺])	
Iron	0.20	(Fe ⁺⁺)	
Potassium	2.4	(K [*])	
Barium	0.66	(Ba ⁺⁺)	
Strontium	0.61	(Sr ⁺⁺)	
Manganese	0.01	(Mn ⁺⁺)	
Anions:	mg/L	as:	
Sulfate	70	(SO, [⁼])	
Chloride	126	(CÍ)	
Gases:		(0.)	
Carbon Dioxide		(CO ₂)	
Hydrogen Sulfide		(H,S)	



Date: 04/22/10

2708 West County Road, Hobbs NM 88240 Phone (505) 392-5556 Fax (505) 392-7307

Source Water 1

Analyzed For

Company	Well Name		County	State	
	Eunice Fre	sh			
Specific Gravity	1.000	:	SG @ 60 °F	1.002	
рH	8.15		Sulfides	Not Tested	
Temperature (°F)	69	Redu	Reducing Agents		
Cations					
Sodium (Calc)	in Mg/L	241	in PPM	240	
Calcium	in Mg/L	40	in PPM	40	
Magnesium	in Mg/L	7	in PPM	7	
Soluable Iron (FE2)	in Mg/L	0.0	in PPM	0	
Anions					
Chlorides	in Mg/L	160	in PPM	160	
Sulfates	in Mg/L	200	in PPM	200	
Bicarbonates	in Mg/L	268	in PPM	268	
Fotal Hardness (as CaCO3)	in Mg/L	130	in PPM	130	
otal Dissolved Solids (Calc)	in Mg/L	916	in PPM	915	

Remarks Fresh Water



Water Analysis

Date: 27-Apr-10

2708 West County Road, Hobbs NM 88240 Phone (505) 392-5556 Fax (505) 392-7307

Analyzed For

Company	v	Well Name P & S		County	
Basic				_ea	New Mexico
Sample Source	Swab Sa	mple	Sample #		1
Formation			Depth		
Specific Gravity	1.200		SG @	60 °F	1.202
pН	7.01		Su	ulfides	Absent
Temperature (°F)	70		Reducing A	gents	
Cations					
Sodium (Calc)		in Mg/L	115,075	in PPM	95,736
Calcium		in Mg/L	2,800	in PPM	2,329
Magnesium		in Mg/L	720	in PPM	599
Soluable Iron (FE2)		in Mg/L	0.0	in PPM	0
Anions					
Chlorides		in Mg/L	182,000	in PPM	151,414
Sulfates		in Mg/L	2,200	in PPM	1,830
Bicarbonates		in Mg/L	98	in PPM	81
Total Hardness (as CaCC)))	in Mg/L	10,000	in PPM	8,319
Total Dissolved Solids (C	alc)	in Mg/L	302,892	in PPM	251,990
Equivalent NaCl Concent	ration	in Mg/L	251,498	in PPM	209,233
caling Tendencies					
Calcium Carbonate Index	{				273,280
Below 500,00	00 Remote / 500	,000 - 1,000,00	0 Possible / Above 1	,000,000 Probabl	θ
Calcium Sulfate (Gyp) Inc Below 500,00	dex 0 Remote / 500.	000 - 10,000,0) Possible / Above 10	0,000,000 Probab	6,160,000 /e
This Calculation is only an app eatment.	proximation an	d is only valid	before treatment of	f a well or severa	al weeks after

Remarks RW=.04@70F

Submit 3 Copies To Appropriate District Office	ubmit 3 Copies To Appropriate District State of New Mexico Office Energy Minerals and Natural Resources					Form	C-103
District J 1625 N. French Dr. Hobbs, NM 88240	Energy, winterais a	iu Naturai Kesot	lices	WELL API	NO.		27, 2004
District II	OIL CONSERVA	TION DIVISI	ON	30-025-268	84		
1301 W. Grand Ave., Artesia, NM 88210 District III	1220 South 9	St. Francis Dr	U.V.	5. Indicate	Type of Lo	ease	
1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe	NM 87505	-	STA		FEE	FED
District IV 1220 S. St. Francis Dr., Santa Fe, NM	Sana re,	1414 67505		6. State Of	a Gas Le	ase No.	
87505							
SUNDRY NOT (DO NOT USE THIS FORM FOR PROPO DIFFERENT RESERVOIR. USE "APPLIC	CES AND REPORTS ON SALS TO DRILL OR TO DEEPE CATION FOR PERMIT" (FORM	WELLS N OR PLUG BACK T C-101) FOR SUCH	N O'	7. Lease N	Eunice Bi	it Agreement	Name
PROPOSALS.)	Gas Well D Other	Brine	ſ	8. Well Nu	mber (001	
2. Name of Operator				9. OGRID	Number		_
Basic Energy Services						246368	
3. Address of Operator P.O. Box 10460 Midlar	id, TX 79702			10. Pool na BSW;	ume or Wil Salado	dcat	
4. Well Location							
Unit LetterO:	630_feet from theS	outh line and	2427	feet from	the	East_line	
Section 34 Townshi	p 21-S Range	37-E NM	PM	Lea	County		
	11. Elevation (Show when	ther DR, RKB, RT	; GR, etc.)		No. Contraction		
Pit or Below-grade Tank Application	or Closure	420 GL			The second second		
Pit type Depth to Groundw	ater Distance from neares	t fresh water well	Distance	from nearest s	urface water	r N/A	
Pit Liner Thickness: mil	Below-Grade Tank: Volume	bbl	s: Constru	ction Material			
12 Check	Appropriate Box to Ind	icate Nature of	Notice I	anort or (thar Dat	10	
12. Check /	appropriate Box to file	icate Nature of	Notice, I	cepon or c	Juler Da	la	
NOTICE OF IN	ITENTION TO:		SUBS	SEQUEN	T REPO	RT OF:	
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMED	IAL WORK		AL	TERING CAS	
	MULTIPLE COMPL		NCE DRIL	LING OPNS		ND A	
OTHER:	MOLTIFLE COMPL			JOB			
 Describe proposed or comp of starting any proposed we or recompletion. 	leted operations. (Clearly s ork). SEE RULE 1103. Fo	state all pertinent d r Multiple Comple	letails, and etions: Atta	give pertine ach wellbore	nt dates, in diagram o	icluding estin	nated date
1) Set CIBP @ 1,380'.		Woam					
2) $1 \log 101,380 - Circ hole v3) PUH to 500' - Spot 50sx c$	mLF. Cap BF w/ 100sx c	mt. woc-Tag.					
4) PUH to 100' - Spot 25sx c	mt to surface.						
I hereby certify that the information grade tank has been/will be constructed or	above is true and complete closed according to NMOCD gu	to the best of my idelines ⊠, a general	knowledge I permit 🗋 o	and belief.	l further cer) alternative	tify that any pit OCD-approved	t or below- l plan [].
SIGNATURE 57	TITLE_	P&A Tech	(Basic E	nergy Servic	es) DAT	E 8/5/10	
Turne or parint more a Care D	P. mail a 11						
For State Use Only	E-mail address: greg.t	oryant@basicenerg	gyservices.	com Tele	phone No.	432-563-335	5

APPROVED BY:	TITLE	DATE
Conditions of Approval (if any):		

THE CONTRACTORY OF THE CONTRACTO



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For closed-loop systems that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, submit to the appropriate NMOCD District Office.

Closed-Loop System Permit or Closure Plan Application

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Type of action: 🛛 Permit 🗌 Closure

Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

Operator: Basic Energy Services	OGRID #:246368					
Address: P.O. Box 10460 Midland, TX 79702						
Facility or well name: Eunice Brine Well #001						
API Number: 30-025-26884 OCD P	ermit Number:					
U/L or Qtr/QtrOSection34 Township21-S	Range 37-E County: Lea					
Center of Proposed Design: Latitude32.429824545503 Longitude	-103.150191595848 NAD: 1927 1983					
Surface Owner: 🛛 Federal 🗌 State 🗌 Private 🗌 Tribal Trust or Indian Allotme	ent					
 <u>Closed-loop System</u>: Subsection H of 19.15.17.11 NMAC Operation: Drilling a new well Workover or Drilling (Applies to activities Above Ground Steel Tanks or Haul-off Bins 	which require prior approval of a permit or notice of intent) 🛛 P&A					
Signs: Subsection C of 19.15.17.11 NMAC ⊠ 12"x 24", 2" lettering, providing Operator's name, site location, and emergence Signed in compliance with 19.15.3.103 NMAC	y telephone numbers					
4. Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. ○ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC ○ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC ○ Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC ○ Previously Approved Design (attach copy of design) API Number: ○ Previously Approved Operating and Maintenance Plan - API Number:						
s. Wante Damand Clause For Claudel and a strain statement of						
Instructions: Please indentify the facility or facilities for the disposal of liquids, facilities are required.	<u>I Steel Tanks or Haul-off Bins Only</u> : (19.15.17.13.D NMAC) drilling fluids and drill cuttings. Use attachment if more than two					
Disposal Facility Name:Gandy-Marley Inc	Disposal Facility Permit Number: NM-01-0019					
Disposal Facility Name:CRI	Disposal Facility Permit Number: NM-01-0006					
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations? Yes (If yes, please provide the information below) No						
Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC						
6. Operator Application Certification:						
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.						
Name (Print):Greg Bryant	Title: P&A Tech					
Signature: OS	Date:8/5/10					
e-mail address: greg.bryant@basicenergyservices.com	Telephone:(432) 563-3355					
Form C-144 CLFZ On C	D					

EXHIBIT E
7. <u>OCD Approva</u> l: Permit Application (including closure plan) Closure P	lan (only)
OCD Representative Signature:	Approval Date:
Title:	OCD Permit Number:
L <u>Clasure Report (required within 60 days of closure completion)</u> : Subsection Instructions: Operators are required to obtain an approved closure plan prior The closure report is required to be submitted to the division within 60 days of section of the form until an approved closure plan has been obtained and the c	K of 19.15.17.13 NMAC to implementing any closure activities and submitting the closure report. the completion of the closure activities. Please do not complete this losure activities have been completed.
». <u>Closure Report Regarding Waste Removal Closure For Closed-loop Systems</u> Instructions: Please indentify the facility or facilities for where the liquids, dri two facilities were utilized.	That Utilize Above Ground Steel Tanks or Haul-off Bins Only: iling fluids and drill cuttings were disposed. Use attachment if more than
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed on on Yes (If yes, please demonstrate compliance to the items below) No	r in areas that will not be used for future service and operations?
Required for impacted areas which will not be used for future service and operate Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	ions:
a <u>Operator Closure Certification</u> : I hereby certify that the information and attachments submitted with this closure is belief. I also certify that the closure complies with all applicable closure requirer Name (Print):	report is true, accurate and complete to the best of my knowledge and nents and conditions specified in the approved closure plan.
Signature:	Date:
e-mail address:	Telephone:

EXHIBIT E

Oil Conservation Division

Page 2 of 2

I. Design Plan

Above ground steel tanks will be used for the management of all plugging fluids.

II. Operations and Maintenance Plan

Basic Energy will operate and maintain all of the above ground steel tanks involved in plugging operations in a prudent manner to prevent any spills. If a leak develops, the appropriate division district office will be notified within 48 hours of the discovery and the leak will be addressed. During an upset condition the source of the spill is isolated and addressed as soon as it is discovered. Free liquids will be removed and loose topsoil will be used to stabilize the spill. The contaminated soil will be either bioremediated or excavated and taken to an agency approved disposal facility.

ill. Closure Plan

All plugging fluids will go to above ground steel tanks and will be hauled by various trucking companies to an agency approved disposal facility.

Impacted areas which will not be used for future service or operations will be reclaimed and reseeded as stated in the APD.

Basic Energy Services Eunice Brine Well #001 Unit 0, Section 34, T215, R37E Lea County, New Mexico API# 30-025-26884

Equipment & Design:

Basic Energy Services will used a closed loop system in the plug and abandonment of this well. The following equipment will be on location:

(1) 250 bbl steel reverse tank

Operations & Maintenance:

During each day of operation, the rig's crew will inspect and closely monitor the fluids contained within the steel tank and visually monitor the release that may occur. Should a release, spill or leak occur, the NMOCD District 1 office in Hobbs (575-393-6161) will be notified, as required in NMOCD's rule 19.15.29.8.

Closure:

After plugging operations, fluids and solids will be hauled and disposed at Gandy-Marley Disposal's location, permit number NM 01-0019. Secondary site will be CRI Disposal, permit number NM 01-0006. Basic Energy Services Eunice Brine Well #001 Unit 0, Section 34, T215, R37E Lea County, New Mexico API# 30-025-26884



All distances approximate Not to scale



EXHIBIT F

ANNUAL CLASS III WELL REPORT

BASIC ENERGY SERVICES L.P.

$\mathbf{BW} - \mathbf{002}$

API # 3002526884

EUNICE BRINE WELL # 001

MAY 28, 2014

DAVID ALVARADO

Payment of Discharge Plan Discharge Fees

Pursuant to 20.6.2.3114 NMAC

Basic Energy Services LP has paid all known filing fees needed to pursue its Class III Brine well BW-002 Eunice Brine # 001. We still await the Permit. We have requested a check request for the permit fee of \$1,700.00 and will be mailed to Water Quality management Fund in care of OCD at 1220 South St. Frances Drive in Santa Fe, New Mexico 87505.

Permit Expiration and Renewal

Pursuant to Regulation 20.6.2.510F NMAC Basic Energy Services LP permit will expire on **November 8**, **2018** renewal will be submitted no later than 120 days before expiration date.

Modification and Terminations

Basic Energy will notify the OCD Director and OCD's Environmental Bureau of facility expansions or Process modifications as per 20.6.23107C. No change in our solution mining has occurred. The same amount of storage is still being used. Basic Energy has installed an integrated system to monitor security and actuation valves.

Transfer of Class III well Discharge Permit

Basic Energy Services L.P. Understands under 20.6.2.5101H NMAC Director will receive notice 30 days prior to the transfer date. The OCD Director may object prior to the proposed transfer date. OCD may require modifications to the discharge permit as a condition of transfer, and may require demonstration of adequate financial responsibility. The Permittee and the succeeding Permittee shall include an acknowledgement that the succeeding Permittee shall be responsible for compliance with the Class III well discharge permit upon taking possession of the facility. A specific date for transfers coverage of liability and information relation to the succeeding Permittee's financial as per20.6.2.5210B (17) NMAC

Compliance and Enforcement

Basic Energy Services L.P. will comply with any compliance order that requires immediately or within a specified time period and subject to penalty as per 74-6-10 NMSA 1978 also under 74-6-10.2 NMSA 1978 falsifying, tampering, with or rendering inaccurate any monitoring

devices or record required by a Discharge Permit issued pursuant to a state or federal law or regulation.

Quarterly Monitoring Requirements for Class III wells

Basic Energy Services L.P. will comply with the Analyze please see attached water analyze. Unfortunately the order to follow the old permit ruling was dropped due to a communication failure on our side, it fell thru the cracks. We are now on track with WADCO our chemical people and will provide the last dated analyzed data and one that is now being taken 5/20/14 so that comparison may be done.

Solution Cavern Monitoring Program

Basic Energy Services L.P. has a program in place. Construction Surveying Services in Alamogordo NM 88311 placed a total of eight monuments for future monitoring. Please see the attached and proposal sent to NM OCD on August 29th s 2013 by Permit West. We will do our next survey in June of 2014.

Solution Cavern Characterization Program

Basic Energy L.P. is looking into different geophysical methods to give a good and reliable account of size and shape of BW-002 Eunice Brine. I will be pushing for Magneto telluric survey or some kind of electrical resistivity. We will notify OCD with in 180 days of Permit once it is in. Due to the loss of records prior to 2009 Basic Energy has keep an accurate count of produced brine and fresh water injected and has turned in such totals for each month and will continue to send monthly totals of injected fresh water and extracted brine water.

Annual Certification

Basic Energy Services L.P. has reviewed the BW-002 CBL and shows good continuity between the outer most casing and the bore hole wall. A 5 $\frac{1}{2}$ liner was run to the shoe of the $\frac{8}{5}$ and cemented in place to surface assuring that the Rustler and upper water is protected.

Basic Energy Services L.P. placement of the mining area is in marker bed 9 and is continuing to mine in this Halite bed by water induction thru inter most tubular and extracting thru the $5\frac{1}{2}$ " liner. BW-002 is monitored and operates with 250 psi at surface down the tubing. Please see the attached well diagram and C-103 subsequence report of work done to well bore

Contingency Plans

Basic Energy Services L.P. has implemented an integrated system that monitors levels with in the storage vessels by using GWR (guided wire radar) system and Sonar guided with in the fresh water tanks. This system will shut down the pump if levels that are set hit critical. They send an alarm via satellite and received by telephone. The operation will then be looked at and once all systems are clear operations will reset computer back in operation. Unloading pads were placed where Brine is sold with actuation valves are opened once a security number is activated at the systems PLC. Flow meters were installed on the sales line. Allowing the party buying the Brine inters the exact amount of barrels to be bought this will keep any human failure to occur while loading. The facility has a burm around the tanks and lined with a 20 mi liner it will contain 110% of total fluid stored at the facility. -Also the location has a burm to secure any failure. Please see the attached automation isotope that is in operation.

Closure

Pursuant to 20.6.2.5209 NMAC Basic Energy Services L.P. will submit for OCD's approval a closure plan, a completed form C-103 for plugging and abandonment of the Class III well. Basic Energy Services L.P. will submit a Pre- closure notification to OCD Environmental Bureau30 days prior to the date that it proposed to close or to discontinue operation of its Class III well as pursuant 20.6.2.5005B NMAC and await the OCD's Environmental Bureau approval of all well activities be fore implementing its proposed closure Plan. Basic Energy Services L.P. will proved the Environmental Bureau with the Name of the facility, Address of facility, name of the Permittee, Address of the Permittee, Contact person, Phone number, Well number, Type of well, Year of the well construction. Well construction details, Type of discharge, Average flow per day in gallons, closure activities of fluid samples, sediments, appropriate disposal of remaining fluids/sediments, soil contaminated clean up, installation of plugs, ground water and vadose zone, Proposed date of well closure, Name of Preparer and date.

Plugging and Abandonment Plans

Pursuant to 20.6.2.5209A NMAC Basic Energy Services

L.P. will submit to OCD a plugging and abandonment plan that meets the requirements of 20.6.2.3109C

NMAC, 20.6.2.5101C NMAC and 20.6.2.5005 NMAC, for protection of ground water. Basic Energy Services L.P. will comply with 20.6.2.5209 NMAC and understands if requested by OCD Basic Energy Services shall submit for approval prior to closure a revised or updated plugging and abandonment plan also the obligation to implement the plugging and abandonment plan as well as the requirements of the plan survives the termination or expiration of this Discharge Permit.

Record Keeping

Basic Energy Services L.P. has maintained its records of all inspection, Surveys, investigations, etc. and will keep them at hand for five years at the Artesia NM office for OCD inspection review.

Release Reporting

Basic Energy Services L.P. will report unauthorized releases of water contaminants in accordance with any additional commitments made in its approved Contingency Plan that may exceed the standard specified at 20.6.2.3103 NMAC then the OCD's Environmental Bureau will be notified with a report.

Oral Notifications

Basic Energy Services L.P. will notify the OCD's Environmental Bureau and provide them with the name, address, and telephone number of the person in charge of the facility, and the owner of the facility including the name and location, date, time, and the duration of the discharge.

The source and cause of the discharge, description of the discharge, including its chemical composition, with the estimated volume of the discharge and any corrective or abatement action taken to mitigate immediate damage from the discharge will be provided to the OCD Environmental Bureau.

Written Notification

Basic Energy Services will send written notice on form C-141with all attachments with in one week of a discharge to OCD's Environmental Bureau verifying prior oral notification.

Other Requirements

Basic Energy Services L.P. welcomes any authorized OCD representative and will assist with any needed information or help in data gathering as pursuant to Section 74-6-9 NMSA 1978. Hobbs OCD District II will be given 65 days notice if any environmental sampling to be performed pursuant to the Discharge Permit including plugging, abandonment or decommissioning of any equipment associated with Basic Energy Services Class III well. L.P. BW-002 Per 20.6.2.3107B environmental sampling and sent off for analytical laboratory data will be done by an accredited National Environmental Laboratory Accreditation Conference(NELAC) Laboratory. The Permittee shall submit data summary tables, all raw analytical data and Laboratory QA/QC.

Bonding or Financial Assurance

Pursuant to 20.6.2.5210B(17) NMAC Basic Energy Services L.P. has in place all bonding for the BW-002 discharge Permit and documented in OCD file. Please see attachment Blanket Plugging Bond # RLB0011488 And Surface Improvement damage Megabond # RLB0012472

2013 Summary of Class III BW-002

2013 was a wonderful year of brine sales for Basic Energy Services L.P. The total brine sold in 2013 was 374,437 bbls with 4000 bbls in storage. Fresh water from the City of Eunice is still being used and totaled 383,508 bbls for 2013. Showing 97.6 % Brine to Fresh extraction.

Brine sales in 2013 generated \$655,264.75 of revenue. With the increase of drilling in the South Easter part of the State also came with the increase of trucking customers hauling brine.

Basic Energy Services L.P. only allowed new costumers with good credit standing to purchase Brine at the Bw-002. In 2012 we had 26 customers and by the end of 2013 a total of 40 were purchasing brine thus an increase of 153%.

Request to have security and automation installed was in the works. An isotope plan was sent to Jim Griswold and BES PBU VP Wigington for build of an integrated system with loading pads and security cameras. It was finished and is working very well we can track each customer's data and filter data for almost any request.

A meeting at District II with Jim Griswold was conducted and the new Discharge plan was to be set in place. During the meeting placing Monuments around the well location Basic Energy Services L.P. moved quickly and placed an order with Construction Surveying Services form Alamagordo, NM 88311.

A plan was executed on August 29th 2013 of a Vertical Control Monument Installation in Cardinal directions from the well head.

- 1. Two Monuments east and west at a distance of 75 feet from the well.
- 2. Two Monuments north and south at a distance of 150 feet from the well.
- 3. Two Monuments east and west at a distance of 300 feet from the well.
- 4. Two Monuments north and south 600 feet from the well.

All information of the plan is attached with this report.

Monthly Fluid Injection and Brine Production

Please see attachment with this report for totals on each year also the separate data sheet for 2013 and first quarter of 2014. The operating pressure recorded with the field gauge installed at the well head is constant at 240 PSI.

When the Pump is not running a static constant pressure on tubing is 140 PSI.

The total brine sold in 2013 was 374,437 bbls with 4000 bbls in storage. Fresh water from the City of Eunice is still being used and totaled 383,508 bbls for 2013. Resulting 97.6 % Brine extraction to Fresh induction.

Water Analyzes on Brine and Fresh Water

Water Analyzes on Brine and Fresh Water was a failure for 2013 the last water analyzes was taken on 9/12/12 WADCO had not received the order for testing for 2013 due to change of field personnel leaving and not relaying the need to take samples.

I apologize for the break down of communications. Basic Energy Services L.P. is back on track with the testing please accept the 9/12/12 testing and the latest on taken on 5/21/14 for comparison and average for 2013.

Formation MIT

Five year MIT was done on 1-3-11 and pasted. BW-002 next test will be January 3, 2016. Basic Energy has tested the formation on 5/27/14 BW-002 took 800 bbls to load and maintained 210 PSI for 4 hours as due diligence to keep a closer account of data until OCD MIT Formation date January 3, 2016 is done or if requested sooner. Please accept our field in house testing as data for your records also a copy of the OCD required 1-3-11 test chart. Basic Energy Services L.P. will continue conducting in field test and will notify OCD before conducting future testing and invite OCD Officer to witness our testing in the future.

This was one of the topics discussed during the meeting that was held at the District II in being proactive in ground water protection.

Deviations of Operations

No production deviations have occurred in 2013 at the BW-002 Brine well. We are injecting down our most inner tubular that being 2 7/8 plastic coded J-55 and extracting up our 5.5 casing to our production tanks. A flow meter is installed down stream for the well before the 10# brine water is stored in the facilities 4-1000 bbl tanks.

Leaks and Spills

No leaks or spills occurred during 2013.

AOR Review of BW-002

No activity has been shown in the area we had the survey Crew show an areal of the area and no new wells of pipe lines have been noted. Please see the areal of the BW-002 Area.

Summery of Surveys

Basic Energy Services L.P. is still looking in on what the best practice will be for gathering data needed to have a good account of the size and shape of the well bore. The past has shown that the Sonar Survey did not depict a true assessment. Literature read from the survey done on the I&W Brine well in Carlsbad. It showed a closer depiction as to the size and width of the mine well. I feel that the Magneto Telluric Survey by DMT Technology needs to be looked at closely or some other type of electric resistivity survey might be used.

The setting of the eight Monuments by our surveyors will allow us to see if any deviation as occurred. I await their report and will file it to Jim Griswold as soon as I get the report. Please find the plan in place attached with this report.

Water Ratio Injected to Produced Brine

A total of 378,437 bbls of brine was produced in 2013 and a total of 383,508 bbls of fresh water was recorded to produce the Brine. This shows a 98.7 % Brine water to fresh water. This is in line with our given guide lines of 90% and 110%.

Facility Activity and events

The increase of sales shows a demand for our 10# Quality Brine and is attributed to the increase of drilling in the SENM area. Recommendations were made to automate the facility and integrate the system with alarms and stop and open actuation valves allowing the system to fill the Fresh water tanks and closing at a set height. The demand for pump operation is being controlled with the GWR set in the Storage tanks opening the actuation valve and allowing the pump to start injecting water down tubular. This was passed and the approval was given it is in operation and is working well. Security codes were also give to our customers and will not allow any unauthorized visitors to access the system. With this better lighting was installed and security cameras over look the facility.

Certification

Basic Energy services LP (Owner / Operator) by the Officer, whose signature appears, below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained here. Basic Energy Services L.P. will continue to monitor all placed guides lines to insure a safe and environmental operation to the public and its surrounding. Basic Energy Services LP further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, Safety and the environment, change the conditions and requirements of this permit administratively.

Conditions Accepted By:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my information those individuals immediately responsible for obtaining the information, I believe that the information in true accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

<u>Basic Energy Services LP</u> Company Name – Print name above

David H. Alvarado Company Representative – print name

10 vala

Company Representative Signature

Title: New Mexico Fluid Sales Manager

Date: 5/28/14

County	LEA																
RANGE	37E																
TOWNSHIP	21S																
SEC	34		% F/w to Brine	98	103.8	100.0	102.2										
UNIT	0	Fresh	Total	11,714	14,392	10,624	21,683									58,413	
AGE	2427 FEL		F/W End	321206	14392	10624	32307										
FOOT	630 FSL	Max PSI	F/W Start	309492	0	0	10624										
	884	400	PSI		250	250	250										
API	30-025-26	Brine	Total	11,477	14,943	10,624	22,163									59,207	
BES Asset #	18476		End	312258	14943	10624	32789										
e	ine #1		Start	300781	0	0	10626										
Leas	Eunice Br	BES	Month	Jan	Feb	Mar	Apr	May	Jun	ylul	August	Sep	Oct	Nov	Dec	Year total	

27.1% Utilization for April 2014

Well Monthly capability 81,840 bbls

Year throughput capability 982,080 Bbl.

Shut down Feb 15th for building of integration system / Loading pads

Started producing on 3/28/14 waiting for PLC from ICS for Scada terminal

Fully Automated 4/10/14

Totals for 2014 Eunice Brine #1 BW-02

		DEC Accet #	DI		FOOT	LAGE	UNIT	SEC	TOWNSHIP	RANGE	County
5	95	DE3 ASSEL #	F		8				246	376	
Eunice	Brine #1	18476	30-025-2	6884	630 FSL	2427 FEL	0	34	đ	3/5	LEA
BES			Brine	400	Max PSI		Fresh				
Month	Start	End	Total	PSI	F/W Start	F/W End	Total	% F/w to Brine			
Jan	0	16575	16575	250	0	16025	16,025				
Feb	0	22037	22037	250	0	21834	21,834				
Mar	0	35052	35052	250	0	36157	36,157	96.9			
Apr	0	19564	19564	250	0	20121	20,121	97.2			
May	19564	39617	20053	250	20121	40691	20,570	99.7			
nul	39617	68761	29,144	250	40691	70375	29,684	98.2			
VIN	68761	105190	36,429	250	70375	107615	37,240	97.8			
August	105190	156374	51,184	250	107615	159990	52,375	97.7			
Sep	156374	193450	37,076	250	159990	197968	37,978	97.6			
Oct	193450	233708	40,250	250	197968	240048	42080	95.7			
Nov	233708	266685	32,977	250	240048	274154	34,106	96.7			
Dec	266685	300781	34,096	250	274154	309492	35,338	96.5			
							383,508				
ar total			374,437								
		38.1% Util	lization for 201	13							
Well M	onthly capability	81,840 bbls	Capability	Year through	nput 982,080	Bbl.					

Totals for 2013 Eunice Brine # 1 BW-02

2006		BBLS	2007	BBLS	200	8 BBLS		2009	BBLS
DEC		16465	DEC	2600	DĒ	23963		DEC	4320
NON		5550	NON	1080	ON	v 24316		NON	9316
OCT		3580	OCT	30	00	F 29282		OCT	9872
SEP		5490	SEP	1908	SE	se00		SEP	13203
AUG		9590	AUG	12664	AU	NWOO 5		AUG	5575
JUL		NO RECORD	JUL	15430	UL	DOWN		JUL	10143
NUL		NO RECORD	NUL	15278	IUL	NMOD N		NUL	10840
МАҮ		NO RECORD	МАҮ	11365	MA	۲ 721		MAY	3308
APR		NO RECORD	APR	10968	AP	ર 2215		APR	13180
MAR		NO RECORD	MAR	4276	MA	R DOWN		MAR	7735
FEB		NO RECORD	FEB	9341	FE	3 5986		FE8	10055
JAN	ļ	NO RECORD	JAN	23133	NL	10032		JAN	2923
		40675		108073		102115			100470
				Metered	Metered		Metered	Metered	
2010	Brine BBLS	Fresh H2O	2011	Brine BBLS	Fresh H2O	2012	Brine BBLS	Fresh H2O	
DEC			DEC	2,803	2,759	DEC	26,217	25,961	
NOV			NON	10,104	11,154	NON	19,345	19,100	
OCT			OCT	20,363	22,827	OCT	11,572	13,144	
SEP	Shut in	Shut in	SEP	18,479	14,930	SEP	18,479	14,930	
AUG	Shut in	Shut in	AUG	8,446	8305	AUG	11,076	11787	
JUL	1790		JUL	12,591	10,514	JUL	16,878	16,847	
NUL	5740		NUL	12,124	11,344	NUL	15,939	15,344	
MAY	18508	4390	МАҮ	12,984	11,997	МАҮ	11,742	12,053	
APR	10840	3801	APR	10,067	9,153	APR	14,340	15,186	
MAR	9111	3856	MAR	6,431	5,763	MAR	10,165	10,084	
FE8	8546	5328	FEB	11,501	10,247	FEB	10,713	10,641	
NAL	25225	11262	NAL	1,740	1,740	JAN	6,229	6,162	
	42882			127,633	120,733		172,695	171,239	

Year Totals 2006 -2007

2638 Faudree Odessa, Texas 79765-8538 561-5579

Company: WadeCo Specialties, LLC

Well Number:	Eunice #1 Fresh Water Station	Sample Temp:	70
Lease:	Basic Energy	Date Sampled:	9/6/2012
Location:	WC6584	Sampled by:	Wade Havens
Date Run:	9/12/2012	Employee #:	
Lab Ref #:	12-sep-w32435	Analyzed by:	GR

Dissolved Gases

Hydrogen Sulfide	(H2S)				Mg/L .00	Eq. Wt. 16.00	MEq/L .00
Dissolved Oxygen	(02)		NOT ANAI	YZED			
			Cations				
Calcium	(Ca++)				76.38	20.10	3.80
Magnesium	(Mg++)				2.44	12.20	.20
Sodium	(Na+)				52.05	23.00	2.26
Barium	(Ba++)		NOT ANAL	YZED			
Manganese	(Mn+)				.00	27.50	.00
			Anions				
Hydroxyl	(OH-)				.00	17.00	.00
Carbonate	(CO3=)				.00	30.00	.00
BiCarbonate	(HCO3-))			219.96	61.10	3.60
Sulfate	(SO4=)				49.00	48.80	1.00
Chloride	(CI-)				59.06	35.50	1.66
Total Iron	(Fe)				0.09	18 60	00
Total Dissolved Soli	ids				458.99	10.00	.00
Total Hardness as (CaCO3				200.95		
Conductivity MICRO	MHOS/CM				668		
рН 6.72	20			Specific G	ravity 60/60) F.	1.000
CaSO4 Solubility @ 8	80 F.	18.6	65MEq/L,	CaSO4 scal	e is unlikely		
CaCO3 Scale Index							
70.0	-1.232	100.0	882	130.0	37	2	
80.0	-1.102	110.0	642	140.0	37	2	
90.0	882	120.0	642	150.0	142	2	

2638 Faudree Odessa, Texas 79765-8538 561-5579

Company:	Wade	Co Spe	ecialt	ies, LLC					
Well Number: Lease: Location: Date Run:	Eunice I Basic Er WC2222	Brine Sta nergy 71	ation- ļ	Fresh Water S	Sample	Sample Tem Date Sample Sampled by: Employee #	p: 70 ed: 5/2 Wa	21/2014 ade Havens	5
Lab Ref #:	14-may	-h14756				Analyzed by	: GR	Ł	
				Dissoluted					
				Dissolvea G	ases	Ma/I	Fa. V	Nt. N	AFa/L
Hydrogen Sulf	fide	(H2S)				5.00	16.	00	.31
Carbon Dioxid	le	(CO2)				40.00	22.	00	1.82
Dissolved Oxy	gen	(02)		NOT ANAL	YZED				
				Cations					
Calcium		(Ca++)				80.24	20.	10	3.99
Magnesium		(Mg++)				14.59	12.	20	1.20
Sodium		(Na+)				78.79	23.	00	3.43
Barium		(Ba++)		NOT ANAL	YZED				
Manganese		(Mn+)				.00	27.	50	.00
Strontium		(Sr++)		NOT ANAL	YZED				
				Anions					
Hydroxyl		(OH-)				.00	17.	00	.00
Carbonate		(CO3=)				.00	30.	00	.00
BiCarbonate		(HCO3-)				244.40	61.	10	4.00
Sulfate		(SO4=)				46.00	48.	80	.94
Chloride		(CI-)				72.08	35.	50	2.03
Total Iron		(Fe)				3.3	18.	60	.18
Total Dissolve	d Solids					584.40			
Total Hardnes	s as CaC	03				260.42			
Conductivity N	ICROMH	IOS/CM				674			
рН	7.700				Specif	ic Gravity 60	/60 F.	1.	.000
CaSO4 Solubili	ty @ 80 F	Ŧ.	18	.53MEq/L,	CaSO4	scale is unlik	ely		
CaCO3 Scale Ind	lex								
70.0	1	85	100.0	.165	130.	.0	.675		
80.0	0	55	110.0	.405	140.	.0	.675		
90.0	.1	65	120.0	.405	150.	.0	.905		

2638 Faudree Odessa, Texas 79765-8538 561-5579

Company: WadeCo Specialties, LLC

(CI-)

Chloride

Well Number:	Eunice #1 Brine Water Station	Sample Temp:	70
Lease:	Basic Energy	Date Sampled:	9/6/2012
Location:	WC6580	Sampled by:	Wade Havens
Date Run:	9/12/2012	Employee #:	
Lab Ref #:	12-sep-w32436	Analyzed by:	GR

		Dissolved Gases			
			Mg/L	Eq. Wt.	MEq/L
Hydrogen Sulfide	(H2S)		.00	16.00	.00
Carbon Dioxide	(CO2)	NOT ANALYZED			
Dissolved Oxygen	(02)	NOT ANALYZED			
		Cations			
Calcium	(Ca++)		3,143.64	20.10	156.40
Magnesium	(Mg++)		819.84	12.20	67.20
Sodium	(Na+)		95,885.51	23.00	4,168.94
Barium	(Ba++)	NOT ANALYZED			
Manganese	(Mn+)		1.40	27.50	.05
		Anions			
Hydroxyl	(OH-)		.00	17.00	.00
Carbonate	(CO3=)		.00	30.00	.00
BiCarbonate	(HCO3-)		146.64	61.10	2.40
Sulfate	(SO4=)		3,700.00	48.80	75.82

153,168.30

4,314.60

35.50

Total Iron 4.34 18.60 .23 (Fe) Total Dissolved Solids 256,869.68 Total Hardness as CaCO3 11,220.44 Conductivity MICROMHOS/CM 358,800 Specific Gravity 60/60 F. 1.179 6.830 pH CaSO4 Solubility @ 80 F. 68.00MEq/L, CaSo4 scale is likely CaCO3 Scale Index 100.0 3.106 70.0 1.186 1.846 130.0 80.0 1.306 2.326 140.0 3.106 110.0 90.0 1.846 2.326 3.106 120.0 150.0

2638 Faudree Odessa, Texas 79765-8538 561-5579

Company:	Wade	Co Spe	cialties,	LLC					
Well Number: Lease: Location: Date Run: Lab Ref #:	Eunice B Basic En WC2227 5/23/20 14-may-	rine Stat ergy 2 14 h14755	ion- Brine	e Sample	WН	Sample Tem Date Sample Sampled by Employee # Analyzed by	np: ed: : :	70 5/21/2 Wade GR	2014 Havens
			Die	solved G	asas				
			Dis	solveu O	uses	Ma/I	E	a. Wt.	MEa/L
Hvdrogen Sulfi	de (H2S)				5.00)	16.00	.31
Carbon Dioxide	e (CO2)				38.00)	22.00	1.73
Dissolved Oxyg	gen (02)	N	OT ANAL	YZED				
				Cations					
Calcium	(Ca++)				1,222.08	3	20.10	60.80
Magnesium	(Mg++)				4,523.76	5	12.20	370.80
Sodium	(Na+)				93,830.30)	23.00	4,079.58
Barium	(Ba++)	NC	T ANAL	YZED				
Manganese	(Mn+)				5.04	1	27.50	.18
Strontium	(Sr++)	NC	OT ANAL	YZED				
				Anions					
Hydroxyl	(OH-)				.00)	17.00	.00
Carbonate	(CO3=)				.00)	30.00	.00
BiCarbonate	(HCO3-)				195.52	2	61.10	3.20
Sulfate	(SO4=)				3,600.00) ·	48.80	73.77
Chloride	(CI-)				157,372.92	2	35.50	4,433.04
Total Iron Total Dissolved Total Hardness Conductivity M	(I Solids as CaCC ICROMHO	Fe) 93 DS/CM				7 260,799.62 21,602.62 193,800	7 2 2)	18.60	.38
рН	7.040				Specifi	c Gravity 60)/60 F.		1.181
CaSO4 Solubilit	y @ 80 F.		91.13M	IEq/L,	CaSO4	scale is unlik	kely		
CaCO3 Scale Inde	ex								
70.0	1.28	1 1	00.0	2.031	130.	0 3	.031		
80.0	1.43	1 1	10.0	2.651	140.	о з	.031		
90.0	2.03	1 1	20.0	2.651	150.	0 3	.031		





August 29, 2013

Jim Griswold NM Oil Conservation Divison 1220 South St. Francis Dr. Santa Fe, NM 87505

Dear Jim,

I am submitting a draft surface subsidence monitoring plan for Basic Energy Services' Eunice 1 (30-025-26884) and Salado 2 (30-025-32394) brine wells.

Please let me know if you want any changes. Once we have incorporated your ideas, then we will contact the surface owners (see attached air photos). If we are unable to obtain permission to install a monument, then we will contact you and formulate an alternate plan.

Thank you,

Brian Wood

cc: Alvarado



August 29, 2013

VIA EMAIL: brian@permitswest.com

Permits West, Inc. 37 Verano Loop Santa Fe, NM 87508 Attn: Brian Wood

Re: Proposal for Subsidence Measurement at Brine Wells

Dear Mr. Wood:

As requested, we've prepared this proposal for the technique of measurement for subsidence, or the lack thereof, for brine wells. For each well, we propose that eight (8) monuments be set to the standard set forth in the attached document entitled, "Vertical Control Monument Installation" in Cardinal directions from the well head as follows:

- 1) Two monuments, east and west, at a distance of 75 feet from the well.
- 2) Two monuments, north and south, at a distance of 150 feet from the well.
- 3) Two monuments, east and west, at a distance of 300 feet from the well.
- 4) Two monuments, north and south, at a distance of 600 feet from the well.

All monuments would be installed and, using static global positioning surveying methods, coordinates would be determined using the Online Positioning User Service (OPUS) at ngs.noaa.gov for the initial elevations of each vertical control monument. A ninth elevation would be obtained at the top of each well head. Further, the relative elevations of all monuments and the well head would be measured using a digital level with an accuracy of a 1/250th of a foot (+/-0.004ft). This measurement of relative elevations would then be repeated two to three weeks later to ensure that other factors, such as the effect of actually setting the vertical control monument or any other installation-specific anomalies, can be reasonably eliminated from each individual monument. Then, data collection will begin and measurements would be taken at three months, six months, and a year, or at any other interval required, for monitoring of any elevation changes that may occur. Should you have any questions or require more information, please do not hesitate to call.

Sincerely,



Steven J. Sandoval, NMPS 12351 Principal Surveyor

Attach: Vertical Control Monument Installation

Phone: (575) 443-6202 Field Mobile: (575) 491-2371

Fax: (575) 443-1151

www.constructionsurveyingservices.com email: CSSAlamo@aol.com

Top Security™ 3-D Rod Monument Installation Instructions

<u>MONUMENT INSTALLATION INSTRUCTIONS</u> FOR TOP SECURITY™ GPS 3-DIMENSIONAL ROD MONUMENT SYSTEM

CAUTION: Before beginning any monument installation, contact your local ONE-CALL Utility Location Service to verify the safety of your chosen location

IMPORTANT - Read all instructions completely and thoroughly before starting installation.

MATERIALS REQUIRED FOR SETTING MONUMENT:

- 1. Top Security[™] Rod with thread
- 2. Aluminum rod sections with thread
- 3. Spiral drive point
- 4. Aluminum survey cap (special combination compression fit/threaded cap)
- 5. OPTIONAL: DISC-LOCK vibration-proof lock washers (pair)
- 6. BMAC Access Cover (BMAC-5 for 5" PVC pipe or BMAC-6 for 6" PVC pipe)
- 7. PVC Pipe (5" or 6", Schedule 40)
- 8. Steel Stamp Set (for marking information on survey cap)
- 9. Concrete mix
- 10. Water
- 11. Trowel
- 12. Eclectic® UV-6800 Adhesive
- 13. Caulking gun for UV-6800 Adhesive
- 14. Fine-grained washed or play sand
- 15. Installation tools
- 16. Reciprocating driver (Pionjar 120, Cobra 148, or Wacker BHB 25)
 - a. Driving Adapter (MDA with sledge hammer, PDA with reciprocating driver)
 - b. DPA Steel Drive Pin
 - c. Lubricating oil for driving adapter and stainless drive pin
 - d. Vise grip pliers (2) OR Pipe Wrench (two 6" wrenches)
 - e. Hacksaw
 - f. File
 - g. Post Hole Digger or Auger
 - h. Shovel
 - i. Work gloves and proper eye protection and clothing

INSTALLATION

1. THE TIME REQUIRED TO SET AN AVERAGE MARK USING THESE PROCEDURES IS 30 TO 45 MINUTES.

2. Using the Eclectic UV-6800 adhesive, glue BMAC Access Cover to a 24-inch (600 mm) long section of PVC pipe. This will allow the glue to set while continuing with the following setting procedures.

3. *IMPORTANT:* Use proper eye and ear protection! Using a post hole digger, auger, or shovel, dig or drill a hole in the ground at your site, approximately 12 inches (300 mm) in diameter and 36 inches (915 mm) deep.

4. Attach the spiral drive point to one end of the aluminum rod section with a stainless steel thread. On the opposite end of the aluminum rod attach the Stainless Steel Drive Pin (hand tighten both the drive point and the SS Drive Pin). The SS Drive Pin will be used as the impact point for the Driving Adapter in driving the rod into the ground. Drive this section of the rod with a reciprocating driver (*Pionjar 120, Cobra 148, Wacker BHB 25*). Be certain that the reciprocating driver is in the BREAKER position for driving the rod (see owner's manual for setting). Drive the rod section until the Driving Adapter is within approximately 1-inch (25 mm) of ground level e., with approximately 4-inches (100 mm) of rod showing above ground).

5. Remove Driving Adapter and Stainless Steel Drive Pin from installed rod section. Attach another section of aluminum rod. Tighten securely (using DISC-LOCK washers if desired) with two pipe wrenches to rod section already installed. Attach SS Drive Pin and Driving Adapter to top of rod section and continue driving rod sections (see STEP 4) until installation of rod sections slows to the REFUSAL rate (defined as a driving rate of more than 1 minute to drive the rod 1 foot (25 mm) in the ground). IMPORTANT NOTE: TO MEET NGS REQUIREMENTS FOR "REFUSAL" YOU MUST ONLY USE A RECIPROCATING DRIVER. Rod should be driven completely into the ground (and 3 inches [75 mm] below ground level).

6. The last section of rod should now be marked for removal (so the top of the last rod section will be 3 inches [75 mm] below ground level) from the top of the monument assembly. Remove the rod by attaching a pipe wrench on either side of the common joint with the next lower rod section and carefully untighten the top rod from this assembly. IF YOU WERE ABLE TO DRIVE THE LAST SECTION ROD 3 INCHES (75 mm) BELOW GROUND LEVEL, YOU CAN SIMPLY REPLACE THIS ROD SECTION WITH A COMPLETE TOP SECURITY ROD SECTION - GO TO STEP 9. 7. Take the rod section you removed in STEP 6 and place it next to a Top SecurityTM rod section. Using a hacksaw, cut off the portion of Top Security rod section marked. When this is completed, remove approximately 3 inches (75 mm) of the "fins" from cut end of Top Security rod section. Recommended procedure is to use a vise grip pliers and "peel" the fins (take the vise grip pliers and peel the fins and break them off the remaining rod portion by coming down from the top of the rod and bending each fin "back and forth" until the fin is removed). This is best done in 1-inch (25 mm) sections.

8. Use a file to remove any burrs from cut end (and slightly BEVEL the cut end of the Top Security rod section). GO TO STEP 10.

9. IF YOU DID NOT NEED TO CUT LAST SECTION OF ROD IN STEP 6 AND HAVE REPLACED THIS ROD WITH A TOP SECURITY ROD, you can use the Threaded Insert to attach the survey cap to the rod assembly. To do this take the SS Drive Pin, attach it to the Treaded Insert, and then drive the Threaded Insert into the socket of the survey cap. Be certain that the Threaded Insert has been driven <u>completely</u> into the socket. Take the completed survey cap, remove the SS Drive Pin, and using the DISC-LOCK washer (composed of two washers mated together so the beveled sides are placed together to form a "ratchet" appearance) attach the survey disk to the Top Security rod section by screwing the cap down onto the Top Security rod section. Tighten firmly and securely using a wrench. Go to STEP 11.

10. IF THE TOP SECURITY ROD SECTION NEEDS TO BE CUT, use the compression-fit survey cap (with socket) to attached to the Top Security rod. Make a mark approximately 1-inch (25 mm) from the top of the rod (this is where the bottom of the survey cap socket should be driven to). Taking the compression-fit cap, carefully tap the cap onto the Top Security rod using a rubber or urethane-faced hammer and driving the cap completely onto the rod until it reaches the mark on the rod. Be sure the cap is "square" on the rod.

11. Backfill and pack with fine-grained washed or play sand around rod section (sand should be filled to about 20 inches (500 mm) below ground level). Place the PVC pipe and BMAC Access Cover assembly over and around the rod. Tamp BMAC assembly so it is flush with the ground. The survey cap on the rod should be 3 inches (75 mm) below the BMAC Access Cover.

12. Prepare and place the concrete mix around the outside of the PVC pipe and around the BMAC Access Cover, up to the top of the Cover. Trowel the concrete until a smooth and neat finish is produced. Make certain that the concrete has not "seeped" into the Cover or Cover screw. Remover the Access Cover Lid from the Cover Frame and using water, rinse the frame and screw areas to insure no concrete mix residue remains in these areas.

13. Continue to backfill and pack with sand inside the PVC pipe around the rod to about 6 inches (150 mm) below ground level.

14. Remove all debris and excess dirt to leave area in original condition.

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15. Install CARSONITE® model CBM-250 Boundary Marker Post to witness and protect the monument assembly.

16. IMPORTANT: Whenever opening the BMAC Access Cover, protect the threaded opening of the Access Cover Frame by using a piece of duct or masking tape to cover this opening, when exposed, to prevent foreign objects from falling into it. Take care in reinstalling the Access Cover Lid to prevent foreign objects from falling into the threaded opening while tightening screw of Access Cover Lid into Access Cover Frame.

QUESTIONS? PLEASE CALL US FOR ASSISTANCE. CALL TOLL-FREE IN THE U.S.A., CANADA, AND THE CARIBBEAN ISLANDS AT 1-800-356-7388. OUTSIDE THE U.S.A., CALL 1-608-249-8549.

Prof. String Production String Liner	Surface String) 		Run Number B	Bo	Witnessed By	Recorded By	Location	Frisioment Number	Time I well Ready	Estimated Cement T	Max Recorded Tem	Density / Viscosity	Type Fluid	Open Hole Size			Ormh Looger		Date	C V F C S	orn Vell ield Our tate	pan ity	y 3 E LI	ASIC E UNICE EA	NER NO.0	GY SE 101	RVIC	ES,LP	•			
7*	SIZB			it From	rehole Record				Write		op I	ē					3				Unling Measure	Log Measured	Permanent Dat	6		Location:	County	Field	Well	Company	ZELINE		
	Watt			То		DAVID ALVARAD	PALI ZARAGOZ			0730	SURF.	NA	NA	WATED	ANA C	144/		1450	ONE .	12-28-2010	ed From K.B.	From G.L.	um G.L	EC TWP	630'FSL		LEA		EUNICE NO	BASIC ENER			
SURF				Size Weight	Tubi												-						Elevatic	RGE	&2427FEL	APT#: 300252688	State		.001	RGY SERVICES			GAMMA
1464	Bottom		-	From	ig Record																GL.	DF		Eleva	· ·	4 Other S	N.MEX			Ţ		OG	BOND
Second	id <u>Ĥe</u> station since since	re >> ns are ation, urred	> and or su	nion we usta	 shi ine	alt i d b	j ad o not, y a	on i ex	infe cer infe	ren otir res		s fro e Ca ing sur g	ase from gen	i elex of : n ai erai	ctri- gro ny i te	cal oss inte	or or or serp	ott wil	ier Iful atic	me ne	glig nad	iren Ieno Ie b	neni xe o y ar	isan noui nyof utin	d we ca r part, b our offi cur curi	nnot e liat cers, rent F	and d le or r agent	o not <u>c</u> respon s or en chedu	juarar sible f nploye	itee the for any l tes. The	accurs oss, co ose inte	acy or asts, d erpreti	correct amage ations a
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 Database File:
 basic_energy_eunice_#1.db

 Dataset Pathname:
 pass13

 Presentation Format:
 cbl_drs

 Dataset Creation:
 Tue Dec 28 10:39:24 2010 by Log Std Casedhole 07122

 Charted by:
 Denth in Feet scaled 1:240

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360 TRAVEL TIME (usec)	260	AMP AMPLITUDE (mV)	10 200 Vari, Density 1
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0 Gamma Ray (GAPI)	150		
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Gamma Ray			
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Casing Collar Locator			
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Submit I Copy To Appropriate District	State	of New M	fexico		Form C-103				
District I	Energy, Miner	als and Na	October 13, 2009						
1625 N. French Dr., Hobbs, NM 88240	WELL API NO.								
District II 1301 W. Grand Ave. Artesia NM 8821/	OIL CONSE	RVATIO	N DIVISION	3002526884					
District III	1220 So	uth St. Er.	5. Indicate Type of Lease						
1000 Rio Brazos Rd., Aztec, NM 87410	1220 30 Sonto	E DDA		STATE FEE xx					
<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa	6. State Oil & Gas Leas	e No.						
SUNDRY NO (DO NOT USE THIS FORM FOR PROF	TICES AND REPORTS OSALS TO DRILL OR TO D	ON WELL	S LUG BACK TO A	7. Lease Name or Unit A	Agreement Name				
PROPOSALS.)	LICATION FOR PERMIT* (F	ORM C-101) I	OR SUCH	Eunice No # 001 BW - 0	002				
1. Type of Well: Oil Well	8. Well Number # 1								
2. Name of Operator BASiC Energy Services				9. OGRID Number					
3. Address of Operator				10. Pool name or Wilder	at .				
P.O. Box 10460 Midland Tx. 797	702			Salado					
4. Well Location									
Unit Letter O : 630	feet from the South lin	ne and 24	27 feet from the F	ast line					
Section 34	Townshin 21	с р.	27_1001 1011 110		untu Leo				
50000A 54	II Flevation (Show)	S N	UIGC J/ E PKR PT GP ato 1	NMPM Co	unty Lea				
		whether Di	, MD, MI, OK, elc.)						
12. Check	Appropriate Box to 1	Indicate N	lature of Notice	Report or Other Data					
			,						
NOTICE OF IN	NTENTION TO:		SUBS	SEQUENT REPORT	OF:				
	PLUG AND ABANDO	N 🗌	REMEDIAL WORK						
	TEMPORARILY ABANDON				A 🗌				
DOWNHOLE COMMINGLE	MULTIPLE COMPL		CASING/CEMENT	JOB 🗌					
OTHER:				15.5 15.5# FJ J-55 FL4S t	hread.				
13. Describe proposed or comp of starting any proposed we proposed completion or rec	oleted operations. (Clear ork). SEE RULE 19.15.	ly state all j 7.14 NMAC	certinent details, and C. For Multiple Com	give pertinent dates, inclu pletions: Attach wellbore	ding estimated date diagram of				
Weight of brine has fallen to 9.8, 9.9 lbs/ gal	might have lost integrity in a i	oint above btm	hole assembly @ 1492.4	9' causing fresh water to coming	le with brine on the way				
up the casing.	······································			· classing it con which its committe					
8-7-12 MI EQUP RU well flowing back brin 8-8-12 ND WELL POH LAVING DOWN T	e at fast rate bleeding back to s	tock tanks SD	FN C 1540' BTU W/serrors						
RIH with 7" PKR. set @ 1390' was not able	to hold psi on casing. Moved p	acker one join	t higher same result POH	with PKR SDFN.					
8-9-12 TIH W/Pkr. /plug set plug at 1375' tes 8-10-12 Changed to softer element on packer	t plug will not hold continued set plug at 1250' tested up hol	to move plug a le will psi to 50	and pkr up hole to surface 10# then communicate are	Casing is in tact but orange peal and pkr. Notified Jim Griswold	ed SDFN OCD and BES L.P. Sr.				
8-13-12 POH pkr./plug order 1375' 5 ½" 15.	5# FJ J-55 FL4S waiting on A	FE approval.							
8-22-12 RIH with CIBP on wire line set @ 13	90' bail dump 2sx on top wait	on cmt. RIH t	ag top @ 1380*SDFN						
8-23-12 Cut off 7" casing redressed with Lark 8-24-12 RIH w/ float shoe and collar Shoe @	ten 92 - 7"X, 5.5 head. Csg on h 1375' Float Collar @ 1334-1	Ocation and rac 9' waiting on	ked. SDFN Cmt. Dress 5.5 Cea. W/ I	orken K 5 SV 2 7/8 head					
8-25-12 RU BES LP cmt. crew circulated twice volume capacity head away with 102 sx net C to surface circulated 25sx to pit. SDFN									
8-27-12 RU Reverse unit TIH with 4 - 3.5" cc	Allars to top of shoe drill out to	1365' call OC	D for MIT on Casing. SD	FN					
8-29-12 TD at 1550' left well flowing to stock	tanks (psi on formation due to	atter M11 good conventional	drilling) SDFN	anil down to 1507.5' SDFN, Pic	ase see Mil chart.				
8-30-12 NU well head and placed back to pro 9-6-12 9617 bbls firsth in 9284 bbls brine out	duction brine testing at 10.1 # j show of 10 % brine to fresh 7	per gal will tes	t for a few days.						
	and the of the office to mesh.	cour tour e	-30-12 m 7-0-12						
Spud Date:	Rig	Release Dat	e:						
I hereby certify that the information a	boxe is true and comple	te to the ber	t of my knowledge	and helief					
			a or my knowledge s	ың өспет.					
SIGNATURE	TIT	LE_ <u>SENM</u>	Fluid Sales MGR	DATE_ 9-6-12					
Type or print name <u>DAVID ALVAR</u> For State Use Only	ADO E-mail address: da	avid.alvarad	o @basicenergyserv	<u>ices.com</u> PHONE: <u>575.74</u>	<u>6 2072</u>				
APPROVED BY	ን የጉጉታ የሆኑ	F							
Conditions of Approval (if any):	111L	£		DAIE	,				



TD @ 1818'

Submit To Appropriate District Office Two Copies <u>District [</u>			State of New Mexico Energy, Minerals and Natural Resources						Form C-105 Revised August 1, 2011									
1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 811 S. First St., Artesia, NM 88210 District III					Oil Conservation Division							1. WELL API NO. 3002526884						
Distinct III 1000 Rio Brazos Rd., Aztec, NM 87410 1220 South					20 South S	South St. Francis Dr.					STATE FEE FED/INDIAN							
1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa Fe, NM 87505							Ī	3. State Oil & Gas Lease No.										
WELL COMPLETION OR RECOMPLETION REPORT AND LOG																		
4. Reason for filing:								5. Lease Name or Unit Agreement Name										
COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only)								6. Well Number:										
C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)								#001										
7. Type of Completion:																		
8. Name of Operator BASIC ENERGY SERVICES L.P.									9. OGRID									
10. Address of Operator P.O.10460 MIDLAND TX 79702										11. Pool name or Wildcat SALADO								
12.Location	On Unit Ltr Section O 34		Town: 21S	TownshipRangeL21S37E		Lot	t Feet from 630'		the	S Linc F 2		Feet from the 2427'		ne	County LEA			
Surface:										<u> </u>	_							
BH:		-																
13. Date Spudded 7/1/80	1 14. D 7/7/80	ate T.D). Reached	15.	15. Date Rig Released 7/17/80				leted	d (Ready to Produce) 17. Elevatic RT, GR, etc 3426.5'			utions (DF ctc.)	and RKB,				
18. Total Measured Depth of Well 1816' 19. Plug Back Measured Depth						oth		20. Was Directional Survey Made? 21. Type Electric at CBL, CIL				ric and O	ther Logs Run					
22. Producing Interval(s), of this completion - Top, Bottom, Name SALADO 1320' -																		
23.				-	CAS	ING REC	ORI	<mark>D (R</mark> e	epo	ort all str	ring	<u>gs set in we</u>	ell)					
CASING SU	ZE	W	EIGHT L	<u>B./FT.</u>		DEPTH SET			HO	LE SIZE		CEMENTING RECORD			A	AMOUNT PULLED		
<u>/</u>					1450			8 74			100 3A BURF.							
<u> </u>												_						
				_														
												L		0.00				
24. SIZE			T F	NOTTOM		SACKS CEMENT		SCREEN SI		25. SIZ			IG REC	SET PACKER SET				
5.5 15.5#	SUR	F .	²	375'	175' 120sx "C" 14.8		27		27	7/8 J-55 PC 1544'			N/A					
8/25/12						PPG SURF												
26 Destantion		torval	aire and	aumhor) (DEN Ü			07			ED /				FEZE			
20. renoration record (interval, size, and number) OPEN HOLE 27.								DEPT	EPTH INTERVAL AMOUNT AND KIND MATERIAL USED									
					N/A					N/A								
							004	 \T\T'	07			l						
28. Date First Product	tion		Prod	uction Met	nod (Flo	wing, oas lift m	r KU	שעני ק- Size		tune nume)	Well Status	Prod	or Shu	-in]			
Date rust rioutetion rioutetion method (<i>riowing, gas iijt, pumping - size and type pump)</i>																		
Date of Test Hours Tested		s <i>H WATER</i> Choke Size	H WATER INDUCED THRU TBG.			Oil - Bbl Gas		Gas	<u>PROD.</u> s - MCF Wata		ter - Bbl. Gas - G		Dil Ratio					
	Test Per		Test Period	ist Period														
Flow Tubing Press.	Casing	g Pressi	ure (Calculated 2 Hour Rate	alculated 24- Oil - Bbl. our Rate			G	Gas - MCF		Water - Bbl.		Oil Gr	Oil Gravity - API - <i>(Corr.)</i>				
29. Disposition of Gas (Sold, used for fuel, vented, etc.)												30. T	est Witn	essed By	<i></i>			
31. List Attachme	nts											ľ						
32. If a temporary	pit was u	sed at t	the well, a	ttach a plat	with the	e location of the	tempo	rary pit	t,	· · ·		,			<u></u>			
33. If an on-site b	urial was	used at	the well,	report the e	xact loc	ation of the on-s	ite bur	rial:				ongitude				NI A	D 1927 1992	
L						Lantuuc						Longitude			·	NA	U 174/ 1763	

FEB 1 1 2014
I hereby certify that the information shown on be	oth sides of this form is true and complete	to the best of my knowledge and belief _, sho
Signature Dan Haland	Printed dou'd Alvoral Name Title	SERVIT Dist. Mar + w.d. al
E-mail Address		1-30-14

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southe	astern New Mexico	Northv	Northwestern New Mexico							
T. Anhy 668'	T. Canyon	T. Ojo Alamo	T. Penn A"							
T. Salt_1235'	T. Strawn	T. Kirtland	T. Penn. "B"							
B. Salt 2400'	T. Atoka	T. Fruitland	T. Penn. "C"							
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"							
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville							
T. Queen	T. Silurian	T. Menefee	T. Madison							
T. Grayburg	T. Montoya	T. Point Lookout	T. Elbert							
T. San Andres	T. Simpson	T. Mancos	T. McCracken							
T. Glorieta	T. McKee	T. Gallup	T. Ignacio Otzte							
T. Paddock	T. Ellenburger	Base Greenhorn	T.Granite							
T. Blinebry	T. Gr. Wash	T. Dakota								
T.Tubb	T. Delaware Sand	T. Morrison								
T. Drinkard	T. Bone Springs	T.Todilto								
T. Abo	T	T. Entrada								
T. Wolfcamp	T	T. Wingate								
T. Penn	T	T. Chinle								
T. Cisco (Bough C)	T	T. Permian								

OIL OR GAS SANDS OR ZONES

No. 1, 1	from		to	No. 3,	from		to
No. 2, *	from		to	No. 4,	from		to
			IMPORTAN	IT WATER	SAND	S	
Include	e data or	1 rate of water	inflow and elevation to which w	vater rose in h	ole.		
No. 1, :	from		to			feet	
No. 2,	from		to			feet	
No. 3, 1	from		to			feet	
		LI	THOLOGY RECORD	D (Attach ad	Iditiona	al sheet if n	ecessary)
From	То	Thickness In Feet	Lithology	From	То	Thickness In Feet	Lithology



:,

Isotope of Automation Equipment





STATE OF NEW MEXICO

\$50,000 BLANKET PLUGGING BOND

BOND NO. RLB0011488

File with the OIL CONSERVATION DIVISION, 1220 South St. Francis, Santa Fe, New Mexico 87505

KNOW ALL MEN BY THESE PRESENTS:

That <u>Basic Energy Services, L.P.</u>, (an individual – If dba, must read – Example: John Doe dba ABC Services) (a corporation) (a general partnership), (a limited liability company) (a limited partnership) organized in the State of <u>Texas</u>, and authorized to do business in the state of New Mexico, as PRINCIPAL, and <u>RLI Insurance Company</u>, a corporation organized and existing under the laws of the State of <u>Illinois</u> and authorized to do business in the State of New Mexico, as SURETY, are firmly bound unto the State of New Mexico for the use and benefit of the Oil Conservation Division of the Energy, Minerals and Natural Resources Department (or successor agency) (the DIVISION) pursuant to NMSA 1978, Section 70-2-14, as amended, in the sum of Fifty Thousand Dollars (\$50,000) for the payment of which the PRINCIPAL and SURETY hereby bind themselves and their successors, jointly and severally, firmly by these presents.

The conditions of this obligation are such that:

WHEREAS, the PRINCIPAL has commenced or may commence the drilling of a well or wells to prospect for and/or produce oil or gas, carbon dioxide gas, helium gas or brine minerals, or an injection or other service well or wells related to such exploration or production, on privately owned or state owned lands within the State of New Mexico, or does own or operate, or may acquire, own or operate such a well or such wells, the identification and location of said wells being expressly waived by both PRINCIPAL and SURETY.

NOW, THEREFORE, if the PRINCIPAL and SURETY or either of them or their successors or assigns, or any of them, shall cause all of said wells to be properly plugged and abandoned when dry or when no longer productive or useful for other beneficial purpose, in accordance with the rules and orders of the DIVISION, including but not limited to Rules 101 [19.15.3.101 NMAC] and 202 [19.15.4.202 NMAC], as such rules now exist or may hereafter be amended;

THEN AND IN THAT EVENT, this obligation shall be null and void; otherwise, and in default of complete compliance with any and all of said obligations, the same shall remain in full force and effect.

PROVIDED HOWEVER, that 30 days after receipt by the DIVISION of written notice of cancellation from the SURETY, the obligation of the SURETY shall terminate as to wells acquired, drilled or started, or of which PRINCIPAL assumes operation, after said 30-day period, but shall continue in effect, notwithstanding said notice, as to wells theretofore acquired, drilled, started or operated.

	Signature	
By		By
242	Address	G
Midland,	TX 79701	Hous
	PRINCIPAL	0. Cm
Basic En	ergy Services, L.P.	RLI I

RLI Insurance Company
SURETY
8 Greenway Plaza, Suite 400 Houston, TX 77046
Address
By tal 11.0 Li
Attorney-in-Fact

Paul M. O'Sullivan



ACKNOWLEDGMENT FORM FOR INDIVIDUAL (If dba, must read – Example: John Doe dba ABC Services)

STATE OF)		
COUNTY OF)		
This Instrument was acknowledged before	ore me on thisday	of,
by		
(Name of Individual)	·	
		Notary Public
CE AL		
SEAL		
My Commission Expires		
ACKNOWLEDGMENT FORM FOR	COMPANY	IP, OR LIMITED LIABILITY
	COMPANY	
STATE OF)		
SS.		
This Instrument was acknowledged before	ore me on thisday	20
hr.		
(Name of Person Signing Instrument)	(Capacity, e.g. Pre	sident, Partner, Manager, Member)
, , , , , , , , , , , , , , , , , , ,		
OI(Name of Cornoration Partnership Limited Liabilit	v Company)	
(Nume of Corporation, Farthersing, Emilieu Erabin	y company)	
		Notary Public
		(totaly) ubic
SEAL		
My Commission Expires		
my commission Expires		
ACKNOWLEDC	MENT FORM FOR CORPORATE SU	RETY
STATE OF Texas)		
SS.		
COUNTY OF <u>Harris</u>)		
This Instrument was acknowledged before	remeon this 10th day of	April 20 os
	<u> </u>	
by Paul M. O'Sullivan	, as Attorney-in-Fact for	RLI Insurance Company
(Name of Attorney-in-Fact)		(Name of Corporate Surety)
1956	(12200000000000000000000000000000000000	1000e Dudy
8 1	ROBBIE DUXBURY	Notary Public Robbie Duxbury
SEAL	Notary Public, State of Texas	
	The second secon	
My Commission Expires	10000000000000000000000000000000000000	



RLI Surety A division of RLI Insurance Company

Know All Men by These Presents:

RLB0011488 POWER OF ATTORNEY **RLI Insurance Company**

That the RLI INSURANCE COMPANY, a corporation organized and existing under the laws of the State of Illinois, and authorized and licensed PAUL M. O'SULLIVAN to do business in all states and the District of Columbia does hereby make, constitute and appoint: _ in the City of HOUSTON, State of TEXAS, as Attorney-in-Fact, with full power and authority hereby conferred upon him to sign, execute, acknowledge and deliver for and on its behalf as Surety and as its act and deed, all of the following classes of documents to-wit:

\$50,000.00

Indemnity, Surety and Undertakings that may be desired by contract, or may be given in any action or proceeding in any court of law or equity; policies indemnifying employers against loss or damage caused by the misconduct of their employees; official, bail and surety and fidelity bonds. Indemnity in all cases where indemnity may be lawfully given; and with full power and authority to execute consents and waivers to modify or change or extend any bond or document executed for this Company, and to compromise and settle any and all claims or demands made or existing against said Company.

The RLI INSURANCE COMPANY further certifies that the following is a true and exact copy of a Resolution adopted by the Board of Directors of RLI Insurance Company, and now in force to-wit:

"All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys-in-Fact or Agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers-of-Attorney, or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile."

(Blue shaded areas above indicate authenticity)

SEAL corporate seal affixed this

ATTEST CORPORATE SECRETARY

State of Illinois County of Peoria

On this 10 day of April 2008 before me, a Notary Public, personally appeared Michael J. Stone and Jean M. Stephenson, who being by me duly sworn, acknowledged that they signed the above Power of Attorney as President and Corporate Secretary, respectively, of the said RLI INSURANCE COMPANY, and acknowledged said instrument to be the voluntary act and deed of said corporation.

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LAM ontgomery

SS



UICS 904 (02/08)

RLI INSURANCE COMPANY

PRESIDENT



ONLINE Version

NEW MEXICO STATE LAND OFFICE – Oil, Gas, and Minerals Division BOND FOR CONTRACT PERFORMANCE AND SURFACE OR IMPROVEMENT DAMAGE Surface Improvement Damage Megabond

BOND NO. RLB0012472 (For use of Surety Company)

(For use of State Land Office)

BOND NO.

Know all men by these presents

	Basic Energy Services, LP	, as	Principal,
and	RLI Insurance Company	, as Surety, a corporation organiz	zed,
existing and d	oing business under and by virtue of the laws of the State of	Illinois	and

authorized to transact a surety business in the State of New Mexico, are held and firmly bound unto the New Mexico Commissioner of Public Lands in the sum of Twenty-five Thousand Dollars (\$25,000) for the following uses:

1. For the use and benefit of the Commissioner, to secure the performance of said Principal as lessee under one or more state leases or permits for minerals, oil and gas, coal or geothermal resources or as holder under one or more state rights-of-way or easements which Principal has heretofore executed or may hereafter execute with the Commissioner; and

2. For the use and benefit of the Commissioner, state surface lessees, state land contract purchasers, state patentees, and their successors and assigns, to pay for damages to the surface of lands subject to a state lease or permit for minerals, oil and gas, coal or geothermal resources or a state right-of-way or easement held by Principal, or for damages to surface improvements located thereon, suffered by reason of Principal's operations under a state lease or permit for minerals, oil and gas, coal or geothermal resources or under a state right-of-way or easement.

For the payment of said sum, well and truly to be made, Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

The conditions of the foregoing obligations are:

1. If the above bound Principal or its successors or assigns shall well and truly perform and keep all terms, covenants, conditions, and requirements of all state leases for minerals, oil and gas, coal or geothermal resources and of all state rights-of-way and easements heretofore or hereafter executed by the Commissioner and Principal, including the payment of royalties when due and compliance with all established mining plans; and

2. If Principal or its successors or assigns shall in all respects make good and sufficient recompense, satisfaction or payment to the Commissioner of Public Lands for damages to the surface of lands subject to a state lease or permit for minerals, oil and gas, coal or geothermal resources or a state right-of-way or easement held by Principal and for damages to livestock, water, crops, tangible improvements or surface improvements of any kind located thereon suffered by reason of Principal's operations under such state lease, permit, right-of-way or easement heretofore or hereafter executed by the Commissioner and Principal;

THEN, the obligation to pay the sum of Twenty-five Thousand Dollars (\$25,000) shall be null and void.

If, however, Principal shall default or otherwise fail in performance under such state lease, permit, right-ofway or easement, including the failure to pay royalties when due or to comply with established mining plans, or if Principal shall fail or refuse to make good and sufficient recompense, satisfaction or payment to the Commissioner for damages to the surface of the above designated lands or to improvements located thereon, then the obligation to pay said sum shall remain in full force and effect.

The liability of Surety upon this bond shall not expire upon the termination of any state lease or permit or any



renewal or extension thereof for minerals, oil and gas, coal or geothermal resources or any state right-of-way or easement or any renewal or extension thereof which Principal or its successors or assigns has heretofore executed or may hereafter execute with the Commissioner, but shall be and remain in full force and effect until released in writing by the Commissioner of Public Lands.

Principal and Surety further agree that in the event an action is brought on this bond and a court of competent jurisdiction determines Principal or Surety is in breach of the agreements contained in this bond, Principal or Surety or both of them shall pay to the Commissioner the costs associated with the recovery of the amounts due hereunder, including reasonable attorneys' fees.

This bond is executed pursuant to the laws of the State of New Mexico, including Sections 19-8-24, 19-9-12, 19-10-26, 19-13-19, and 46-6-1 through -9, NMSA 1978.

	5 00mu is written is		Dollars.
In witness whereof we here	eunto set our hands this _26	th_day of March, 2009	
Basic Ener	gy Services, LP	RLI Insurance	e Company
PRINCIPAL P.O. Box 10460, Midland, TX	79702-7460	SURETY 8 Greenway Plaza, Suite 400, Hot	uston, TX 77046
Address BY		Address R. ("M.	orLi
Signature		Attorney-in-Fact Signatu	re Paul M. O'Sullivan
Title			
(Note: Principal, if corpord Corporate seal here)	ation, affix	(Note: Corporate surety, affix Corporate seal here)	
	ACKNOWLEDGMENT	ORM FOR NATURAL PERSONS	
STATE OF)	UKM FUK NATUKAL FERSUNS	
COUNTY OF) ss.		
On this day of _			
before me personally appea	ared		, to me known to
be the person(s) described in the person in the person in the person in the person is the person in the person in the person is	in and who executed the san	e as (his, her, their) free act and deed. cal on the day and year in this certificate first	above written.
Ay commission expires	Notary Public name	Signature, notary	
		Not	C 1)
		100	ary Seal)
			rry Seal)
			rry Seal)

	ACKNOWLEDGMENT	FORM FOR CORPO	RATION
STATE OF)	1	
COUNTY OF) j) ss.	
Outlin days	20		
before we personally a	npeared	,	o me personally known, who, being by
me duly sworn did say	that s/ he is	of	старистану, так у то о у
and that this instrumen	t was signed and sealed on beha	If of said corporation by	authority of its board of directors, and
acknowledged said inst	trument to be the free act and dee	ed of said corporation.	
IN WITNESS WHEREOF	, I have hereunto set my hand and se	al on the day and year in t	his certificate first above written.
My commission expires	Notary Public name	Signature notary	(Notary Se
STATE OF	Texas) ss.	
COUNTY OF	Harris	33.	
On this 26th da	v of March ,	20 09 ,	
before me personally a	ppeared Paul M.	O'Sullivan	, to me personally known, who, bein
by me duly sworn, did s	say that s/he is Atto	orney-in-Fact	of RLI Insurance Company
and that this instrumen	t was signed and sealed on beha	f of said corporation by	authority of its board of directors, and
acknowledged said inst	rument to be the free act and dee	ed of said corporation.	a day and year in this cartificate first
TAL HUTTALECC	WHEREOF, I have hereunio sei	my nunu unu seut on the	
IN WITNESS above written.			St. Filler
IN WITNESS above written. July 22, 2009	Nancy Cruz	Mang	
IN WITNESS above written. July 22, 2009 My commission expires	Nancy Cruz Notary Public name	Signature, notativ	Salers
IN WITNESS above written. July 22, 2009 My commission expires	Nancy Cruz Notary Public name	Signature, notary	S381015
IN WITNESS above written. July 22, 2009 My commission expires	Nancy Cruz Notary Public name	Signature, notary	Sables Sables
IN WITNESS above written. July 22, 2009 My commission expires	Nancy Cruz Notary Public name	Signature, notary	Chipter State
IN WITNESS above written. July 22, 2009 My commission expires Note: Corporate survey	Nancy Cruz Notary Public name	Signature, notary	Chiganityse Chigan
IN WITNESS above written. July 22, 2009 My commission expires Note: Corporate survey APPROVED this	Nancy Cruz Notary Public name	Signature, notary	Saliers and Saliers
IN WITNESS above written. July 22, 2009 My commission expires Note: Corporate survey	Nancy Cruz Notary Public name	Signature, nclay	A SALIST
IN WITNESS above written. July 22, 2009 My commission expires Note: Corporate satisfy APPROVED this NOTE: File before dev	Nancy Cruz Notary Public name Callactic power of attorney day of	Signature, notary	COMMISSIONER OF PUBLIC LAND
IN WITNESS above written. July 22, 2009 My commission expires Note: Corporate survey APPROVED this NOTE: File hefore dev Comu	Nancy Cruz Notary Public name attaction power of attorner day of	Signature, notary	COMMISSIONER OF PUBLIC LAND
IN WITNESS above written. July 22, 2009 My commission expires Note: Corporate survey APPROVED this VOTE: File <u>before</u> dev Comu New P.O.	Nancy Cruz Notary Public name callactic power of atterney day of relopment or operations are com missioner of Public Lands Mexico State Land Office, OGM. Box 1148	Signature, notary Signature, notary , 20 menced, with: D r 310 Old Santa	COMMISSIONER OF PUBLIC LAND

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RLI Surety A division of RLI Insurance Company

Know All Men by These Presents:

RLB0012472 POWER OF ATTORNEY

RLI Insurance Company

That the RLI INSURANCE COMPANY, a corporation organized and existing under the laws of the State of Illinois, and authorized and licensed to do business in all states and the District of Columbia does hereby make, constitute and appoint: ____ PAUL M. O'SULLIVAN in the City of HOUSTON , State of TEXAS , as Attorney-in-Fact, with full power and authority hereby conferred upon him to sign. execute, acknowledge and deliver for and on its behalf as Surety and as its act and deed, all of the following classes of documents to-wit:

\$25,000.00

indemnity, Surety and Undertakings that may be desired by contract, or may be given in any action or proceeding in any court of law or equity; policies indemnifying employers against loss or damage caused by the misconduct of their employees; official, bail and surety and fidelity bonds. Indemnity in all cases where indemnity may be lawfully given; and with full power and authority to execute consents and waivers to modify or change or extend any bond or document executed for this Company, and to compromise and settle any and all claims or demands made or existing against said Company.

The RLI INSURANCE COMPANY further certifies that the following is a true and exact copy of a Resolution adopted by the Board of Directors of RLI Insurance Company, and now in force to-wit:

"All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys-in-Fact or Agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers-of-Attorney, or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile."

(Blue shaded areas above indicate authenticity)

IN WITNESS WHEREOF, the RLI Insurance Company has caused these presents to be executed by its _____PRESIDENT ____ with its corporate seal affixed this

ATTEST CORPORATE SECRETARY

State of Illinois

County of Peoria

On this 26 day of Mar. 2009 before me, a Notary Public, personally appeared Michael J. Stone and Jean M. Stephenson, who being by me duly sworn, acknowledged that they signed the above Power of Attorney as President and Corporate Secretary, respectively, of the said RLI INSURANCE COMPANY, and acknowledged said instrument to be the voluntary act and deed of said corporation.

"OFFICIAL SEAL" PUBLIC STATE OF UNIVOUS COMMISSION EXPIRES 02/02/12

L M ontgomery Notary Public

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RLI INSURANCE COMPANY PRESIDENT

UICS 904 (02/08)







		Annual Report Contents	Annual Report: All operators shall submit an annual report due on January	31 of each	year. The report shall include the following information:	1 Cover sheet marked as "Annual Brine Well Benort, name of operator.	sw	permit #, API# of well(s), date of report, and person submitting report.	2. Brief summary of brine wells operations including description and	eason for	any remedial or major work on the well. Copy of C- 103.	3. Production volumes as required above in 21.G. including a running total	should	be carried over to each year. The maximum and average injection	bressure.	4. A copy of the chemical analysis as required above in 21.1-1.	5. A copy of any mechanical integrity test chart, including the type of test,	.e.	open to formation or easing test.	6. Brief explanation describing deviations from normal production	methods.	7. A copy of any leaks and spills reports.	8. If applicable, results of any groundwater monitoring.	9. Information required from cavity/subsidence 21.F. above.	10. An Area of Review (AOR) summary.	11. Sign-off requirements pursuant to WQCC Subsection G 20.6.2.5101.	
NMOCD UIC Annual Reports	. 11/18/09	Annual Rpt. Due Date Submitted	01/31/10 L	ſ			8			re			S		đ						E						
		Operator	Basic Energy																								
		Permit ID	BW-2																								

Gandy Corp.	01/31/10	L. Annual Report: All operators shall submit an annual report due on January 31 of each
		year. The report shall include the following information:
		1. Cover sheet marked as "Annual Brine Well Report, name of operator,
		BW
		permit #, API# of well(s), date of report, and person submitting report.
		2. Brief summary of brine wells operations including description and
		reason for
		any remedial or major work on the well. Copy of C- 103.
		3. Production volumes as required above in 21.G. including a running total
		should
		be carried over to each year. The maximum and average injection
		pressure.
		4. A copy of the chemical analysis as required above in 21.1-1.
		5. A copy of any mechanical integrity test chart, including the type of test,
		i.e.
		open to formation or easing test.
		6. Brief explanation describing deviations from normal production
		methods.
		7. A copy of any leaks and spills reports.
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		11. Sign-off requirements pursuant to WQCC Subsection G 20.6.2.5101.
AB- Salty Dog	Mo. w/ Qtly Rpts.	

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BW-4

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PAB BW-8

L. Annual Report: All operators shall submit an annual report due on January 31 of each year. The report shall include the following information:	 Cover sheet marked as "Annual Brine Well Report, name of operator, BW permit #, API# of well(s), date of report, and person submitting report. 	Brief summary of brine wells operations including description and reason for	any remedial or major work on the well. Copy of C-103. 3. Production volumes as required above in 21.G. including a running total	should be carried over to each year. The maximum and average injection	pressure.	 A copy of the chernical analysis as required above in ZI.A. A copy of any mechanical integrity test chart, including the type of test, i.e. 	open to formation or casing test. 6. Brief explanation describing deviations from normal production methods.	7. A copy of any leaks and spills reports.	 If applicable, results of any groundwater monitoring. Information required from cavity/subsidence 21. F. above. 	10. An Area of Review (AOR) summary.	11. Sign-off requirements pursuant to WQCC Subsection G 20.6.2.5101.	Production/Injection Volumes/Annual Report: The volumes of fluids injected (fresh water) and	produced (brine) will be recorded monthly and submitted to the OCD Santa Fe Office in an annual	report due on the thirty-first (31) day of January of each year.	
01/31/10												01/31/10			
Gandy Corp.	·											Basic Energy			
BW-22												BW-25			

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BW-27	Mesquite	01/10/10	 Production/Injection Volumes: The volumes of fluids injected (fresh water) and produced (brine) will be recorded monthly and submitted to the OCD Sanla Fe Office in an annual report due on the first day of January of each year.
BW-28	ey Ernergy Services LI	01/31/10	L. Annual Report: All operators shall submit an annual report due on January 31 of each year. The report shall include the following information:
			1. Cover sheet marked as "Annual Brine Well Report, name of operator, BW
			permit #, API# of well(s), date of report, and person submitting report. 2. Brief summary of brine wells operations including description and reason for
			any remedial or major work on the well. Copy of C-103. 3. Production volumes as required above in 21 .G. including a running total should
·			be carried over to each year. The maximum and average injection pressure.
			 A copy of the chemical analysis as required above in 21 .H. A copy of any mechanical integrity test chart, including the type of test, i.e.
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			 A copy of any leaks and spills reports. If applicable, results of any groundwater monitoring. Information required from cavity/subsidence 21. F. above. An Area of Review (AOR) summary. Sign-off requirements pursuant to WQCC Subsection G 20.6.2.5101.

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01/31/10		01/31/10
Liquid Resources		HRC- Schubert
BW-30		BW-31

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Chavez, Carl J, EMNRD

From: Sent:	Chavez, Carl J, EMNRD Friday, September 25, 2009 1:48 PM
Ter	Brather Ctauch Landr 200 and a native Lamon Milletthe Clay Wildon's Pack Datterson's 'Blaying
10:	Sam'; 'David Pyeatt'; 'garymschubert@aol.com'
Cc:	Sanchez, Daniel J., EMNRD; VonGonten, Glenn, EMNRD; Griswold, Jim, EMNRD; Jones,
	William V., EMNRD
Subject:	New Mexico Oil Conservation Division Class III Solution Mining Well Operator Notice ANNUAL REPORTS

Gentlemen:

Re: Annual Reporting

You are receiving this message because you are currently operating a Underground Injection Control (UIC) Class III Solution Mining Well in New Mexico under an Oil Conservation Division (OCD) Discharge Permit. You may be aware of the most recent events related to OCD Class III Wells in New Mexico and can find out more by visiting the OCD's Webste at http://www.emnrd.state.nm.us/OCD/brinewells.htm and OCD Brine Well Work Group Website at http://www.emnrd.state.nm.us/imaging/AEOrderFileView.aspx?appNo=pCJC0906359521.

The OCD is writing to inform you that it will be monitoring the receipt of your "Annual Reports" under the applicable section of your OCD discharge permit. The OCD has been deficient in tracking reporting obligations in the past; however, the OCD has recently upgraded our online system to track operators who are not meeting the reporting requirements specified in OCD Discharge Permits. Please plan on submitting the report with the required information by the date required in your discharge permit.

To access your OCD Discharge Permit Online for the date of submittal and contents of the report, please go to OCD Online at <u>http://ocdimage.emnrd.state.nm.us/imaging/AEOrderCriteria.aspx</u> (enter "Order Type" as BW and your "Order Number"). If you have not submitted an Annual Report (report) for your well, a historical review of your injection and production records will be required in order to provide cumulative injection and production information in this year's report.

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Please contact me if you have questions or need assistance.

Thank you in advance for your cooperation in this matter.

Copy: Brine Well Files BWs 2, 4, 8, 22, 25, 27, 28, 30 & 31

Carl J. Chavez, CHMM New Mexico Energy, Minerals & Natural Resources Dept. Oil Conservation Division, Environmental Bureau 1220 South St. Francis Dr., Santa Fe, New Mexico 87505 Office: (505) 476-3490 Fax: (505) 476-3462 E-mail: <u>Carl J. Chavez@state.nm.us</u> Website: <u>http://www.emnrd.state.nm.us/ocd/</u>index.htm (Pollution Prevention Guidance is under "Publications")