



RAILROAD COMMISSION OF TEXAS

Form W-2

1701 N. Congress  
P.O. Box 12967  
Austin, Texas 78701-2967

Status: Approved  
Date: 06/06/2019  
Tracking No.: 205297

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT, AND LOG

OPERATOR INFORMATION			
Operator Name: OASIS PETROLEUM PERMIAN LLC		Operator No.: 617484	
Operator Address: 1001 FANNIN STREET STE 1500 HOUSTON, TX 77002-0000			

WELL INFORMATION			
API No.: 42-495-34008		County: WINKLER	
Well No.: 5104H		RRC District No.: 08	
Lease Name: UL 21 BIGHORN D 21-31-19		Field Name: PHANTOM (WOLFCAMP)	
RRC Lease No.: 51497		Field No.: 71052900	
Location: Section: 31, Block: 21, Survey: UL, Abstract: U71			
Latitude: 31.696390		Longitude: -103.244840	
This well is located 7 miles in a SW direction from WINK, which is the nearest town in the county.			

FILING INFORMATION			
Purpose of filing: Initial Potential			
Type of completion: New Well			
Well Type: Producing		Completion or Recompletion Date: 06/12/2018	
Type of Permit	Date	Permit No.	
Permit to Drill, Plug Back, or Deepen	11/16/2018	833905	
Rule 37 Exception			
Fluid Injection Permit			
O&G Waste Disposal Permit			
Other:			

COMPLETION INFORMATION			
Spud date: 01/28/2018		Date of first production after rig released: 06/12/2018	
Date plug back, deepening, recompletion, or drilling operation commenced: 01/28/2018		Date plug back, deepening, recompletion, or drilling operation ended: 03/25/2018	
Number of producing wells on this lease in this field (reservoir) including this well: 2		Distance to nearest well in lease & reservoir (ft.): 1547.0	
Total number of acres in lease: 640.70		Elevation (ft.): 2766 GR	
Total depth TVD (ft.): 11884		Total depth MD (ft.): 22188	
Plug back depth TVD (ft.):		Plug back depth MD (ft.):	
Was directional survey made other than inclination (Form W-12)? Yes		Rotation time within surface casing (hours): 0.0	
Recompletion or reclass? No		Is Cementing Affidavit (Form W-15) attached? Yes	
Type(s) of electric or other log(s) run: Gamma Ray (MWD)		Multiple completion? No	
Electric Log Other Description:			
Location of well, relative to nearest lease boundaries		Off Lease : No	
of lease on which this well is located:		East Line and North Line of the	
331.0 Feet from the		UL 21 BIGHORN D 21-31-19 Lease.	
297.0 Feet from the			

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.			
Field & Reservoir	Gas ID or Oil Lease No.	Well No.	Prior Service Type
W2:	N/A		

PACKET:	N/A
FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:	
GAU Groundwater Protection Determination	Depth (ft.): 650.0
SWR 13 Exception	Date: 12/14/2017
	Depth (ft.):

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION	
Date of test: 07/13/2018	Production method: Flowing
Number of hours tested: 24	Choke size: 23/64
Was swab used during this test? No	Oil produced prior to test: 17931.00
PRODUCTION DURING TEST PERIOD:	
Oil (BBLs): 1061.00	Gas (MCF): 926
Gas - Oil Ratio: 872	Flowing Tubing Pressure: 0.00
Water (BBLs): 3606	
CALCULATED 24-HOUR RATE	
Oil (BBLs): 1061.0	Gas (MCF): 926
Oil Gravity - API - 60.: 35.0	Casing Pressure: 3009.00
Water (BBLs): 3606	

CASING RECORD											
Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	822			C	735	1291.0	SURF ACE	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	4985			C	1320	3556.0	0	Circulated to Surface
3	Intermediate	7	8 3/4	11839			C/H	1000	1873.0	3000	Calculation

LINER RECORD										
Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By	
1	4 1/2	6	10500	21665	PREMIUM PLUS	940	1149.0	1105 0	Calculation	

TUBING RECORD			
Row	Size (in.)	Depth	Packer Depth (ft.)/Type
1	2 7/8	10300	/

PRODUCING/INJECTION/DISPOSAL INTERVAL			
Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 12062	22104.0

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.			
Was hydraulic fracturing treatment performed?	Yes		
Is well equipped with a downhole actuation sleeve?	No	If yes, actuation pressure (PSIG):	0.0
Production casing test pressure (PSIG) prior to hydraulic fracturing treatment:	0	Actual maximum pressure (PSIG) during hydraulic fracturing:	0
Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)?	Yes		
Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)

FORMATION RECORD					
Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
RUSTLER - POSSIBLE FLOW; POSSIBLE USABLE QUALITY W	Yes	704.0	704.0	Yes	
SALADO	Yes	1083.0	1084.0	Yes	
CASTILE	Yes	3041.0	3042.0	Yes	
BELL CANYON	Yes	5097.0	5099.0	Yes	
COLBY-QUEEN	No			No	NOT IN THE DELAWARE BASIN
YATES	No			No	NOT IN THE DELAWARE BASIN
QUEEN-SEVEN RIVERS	No			No	NOT IN THE DELAWARE BASIN
SAN ANDRES - HIGH FLOWS, H2S, CORROSIVE	No			No	NOT IN THE DELAWARE BASIN
HOLT	No			No	NOT IN THE DELAWARE BASIN
DELAWARE	No			No	NOT IN THE DELAWARE BASIN
GLORIETA	No			No	NOT IN THE DELAWARE BASIN
CLEARFORK	No			No	NOT IN THE DELAWARE BASIN
WICHITA ALBANY	No			No	NOT IN THE DELAWARE BASIN
BRUSHY CANYON	Yes	7409.0	7411.0	Yes	
AVALON	Yes	8393.0	8394.0	Yes	
1ST BONE SPRING	Yes	9642.0	9644.0	Yes	
2ND BONE SPRING	Yes	10410.0	10412.0	Yes	
CHERRY CANYON	Yes	5992.0	5994.0	Yes	
CANYON	No			No	BELOW TVD
BONE SPRINGS	No			No	BELOW TVD
MONTOYA	No			No	BELOW TVD
WADDELL	No			No	BELOW TVD
WOLFCAMP	No			No	BELOW TVD
ATOKA	No			No	BELOW TVD
STRAWN	No			No	BELOW TVD
PENNSYLVANIAN	No			No	BELOW TVD
MISSISSIPPIAN	No			No	BELOW TVD
DEVONIAN	No			No	BELOW TVD
SILURIAN	No			No	BELOW TVD
FUSSELMAN	No			No	BELOW TVD
ELLENBURGER	No			No	BELOW TVD
Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm (SWR 36)?					No
Is the completion being downhole commingled (SWR 10)?					No
REMARKS					

RRC REMARKS	
<b>PUBLIC COMMENTS:</b> [RRC Staff 2019-05-23 10:59:11.944] EDL=6550 feet, max acres=704, PHANTOM (WOLFCAMP) oil or gas well;  take points: 15520-22104 feet	
<b>CASING RECORD :</b>	
<b>TUBING RECORD:</b>	
<b>PRODUCING/INJECTION/DISPOSAL INTERVAL :</b> KOP 11100'	
<b>ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :</b>	
<b>POTENTIAL TEST DATA:</b>	

OPERATOR'S CERTIFICATION	
<b>Printed Name:</b> Katrina Boyd	<b>Title:</b>
<b>Telephone No.:</b> (432) 999-6778	<b>Date Certified:</b> 06/04/2019



# RAILROAD COMMISSION OF TEXAS

1701 N. Congress  
P.O. Box 12967  
Austin, Texas 78701-2967

Form W-15

Rev. 08/2014

## CEMENTING REPORT

Cementer: Fill in shaded areas.  
Operator: Fill in other items.

OPERATOR INFORMATION	
Operator Name: FORGE ENERGY	Operator P-5 No.: 276868
Cementer Name: HALLIBURTON	Cementer P-5 No.: 347151

WELL INFORMATION		
District No.: 08	County: WINKLER	
Well No.: 4H	API No.: 495-34008	Drilling Permit No.: 833905
Lease Name: UL 21 BIGHORN	Lease No.:	
Field Name: Phantom (Wolfcamp)	Field No.: 71052900	

I. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Conductor <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production					
Drilled hole size (in.): 17 1/2	Depth of drilled hole (ft.): 822	Est. % wash-out or hole enlargement: 20%			
Size of casing in O.D. (in.): 13 3/8	Casing weight (lbs/ft) and grade: 68# J-55	No. of centralizers used: 7			
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.		Setting depth shoe (ft.): 822	Top of liner (ft.):		
			Setting depth liner (ft.):		
Hrs. waiting on cement before drill-out: 8	Calculated top of cement (ft.): 0	Cementing date: 1/29/18			
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	550	C	SEE REMARKS	1042	510
2	185	C	SEE REMARKS	249	311
3					
Total	735			1291	821

II. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:			
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:			
Tapered string drilled hole size (in.)		Tapered string depth of drilled hole (ft.)			
Upper:	Lower:	Upper:	Lower:		
Tapered string size of casing in O.D. (in.)		Tapered string casing weight(lbs/ft) and grade		Tapered string no. of centralizers used	
Upper:	Lower:	Upper:	Lower:	Upper:	Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO				Setting depth shoe (ft.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:			
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

III. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:			
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:			
Tapered string drilled hole size (in.)		Tapered string depth of drilled hole (ft.)			
Upper:	Lower:	Upper:	Lower:		
Tapered string size of casing in O.D. (in.)		Tapered string casing weight(lbs/ft) and grade		Tapered string no. of centralizers used	
Upper:	Lower:	Upper:	Lower:	Upper:	Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO				Setting depth tool (ft.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:			
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0



CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

REMARKS
LEAD- 3LBM KOL SEAL, 5% SALT, .125LBM POLY TAIL- 1% CALCIUM CHLORIDE

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

JASON WELTON - SSIII

Halliburton

Name and title of cementer's representative

Cementing Company

Signature

6155 W. Murphy St.

Odessa, TX, 79763

432-571-8600

1/29/18

Address

City,

State,

Zip Code

Tel: Area Code

Number

Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Katrina Boyd

Regulatory Specialist

Katrina Boyd

Typed or printed name of operator's representative

Title

Signature

1001 Fannin Street

Houston, TX 77002

713-770-6568

1/29/2018

Address

City,

State,

Zip Code

Tel: Area Code

Number

Date: mo. day yr.

### Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- A. **What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
- The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- B. **How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- C. **Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
- To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- D. **Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. **Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- F. **Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. **Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.



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Cementer Name: HALLIBURTON ENERGY SERVICES	Cementer P-5 No.: 347151

WELL INFORMATION		
District No.: 08	County: WINKLER	
Well No.: 4H	API No.: 495-34008	Drilling Permit No.: 833905
Lease Name: UL 21 BIGHORN	Lease No.:	
Field Name: Phantom (Wolfcamp)	Field No.: 71052900	

I. CASING CEMENTING DATA		
Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.): 12 1/4	Depth of drilled hole (ft.): 5055	Est. % wash-out or hole enlargement: 20
Size of casing in O.D. (in.): 9 5/8	Casing weight (lbs/ft) and grade: 40# HCL-80	No. of centralizers used: 40
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.): 4985	Top of liner (ft.):
		Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: 7.5	Calculated top of cement (ft.): 0	Cementing date: 2/2/18

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	1220	C	N/A	3423	10930
2	100	C	.2% HR 800	133	425
3					
Total	1320			3556	11355

II. CASING CEMENTING DATA		
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:
Tapered string drilled hole size (in.) Upper: Lower:	Tapered string depth of drilled hole (ft.) Upper: Lower:	
Tapered string size of casing in O.D. (in.) Upper: Lower:	Tapered string casing weight (lbs/ft) and grade Upper: Lower:	Tapered string no. of centralizers used Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth shoe (ft.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

III. CASING CEMENTING DATA		
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:
Tapered string drilled hole size (in.) Upper: Lower:	Tapered string depth of drilled hole (ft.) Upper: Lower:	
Tapered string size of casing in O.D. (in.) Upper: Lower:	Tapered string casing weight (lbs/ft) and grade Upper: Lower:	Tapered string no. of centralizers used Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth tool (ft.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0



## CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

## REMARKS

SO 904598791  
CIRCULATED 40 BBL 80 SKS OF CEMENT TO SURFACE

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

## QUINCY EDWARDS SERVICE SUPERVISOR

Halliburton

Name and title of cementer's representative

6155 W. Murphy St.

Cementing Company

Odessa, TX, 79763

Signature

432-571-8600

2/2/18

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Katrina Boyd

Regulatory Specialist

Typed or printed name of operator's representative

Title

Signature

1001 Fannin Street Suite 1500

Houston, TX 77002

713-770-6568

1/29/2019

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

## Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- A. What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
- The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
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- To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- D. Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- F. Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.





# RAILROAD COMMISSION OF TEXAS

1701 N. Congress  
P.O. Box 12967  
Austin, Texas 78701-2967

Form W-15

Rev. 08/2014

## CEMENTING REPORT

Cementer: Fill in shaded areas.  
Operator: Fill in other items.

OPERATOR INFORMATION					
Operator Name: FORGE ENERGY			Operator P-5 No.: 276868		
Cementer Name: HALLIBURTON ENERGY SERVICES			Cementer P-5 No.: 347151		
WELL INFORMATION					
District No.: 08		County: WINKLER			
Well No.: 4H		API No.: 495-34008		Drilling Permit No.: 833905	
Lease Name: UL 21 BIGHORN		Lease No.:			
Field Name: Phantom (Wolfcamp)		Field No.: 71052900			
I. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Intermediate <input type="checkbox"/> Liner <input type="checkbox"/> Production					
Drilled hole size (in.): 8 3/4		Depth of drilled hole (ft.): 11900		Est. % wash-out or hole enlargement: 20	
Size of casing in O.D. (in.): 7		Casing weight (lbs/ft) and grade: 32# P-110		No. of centralizers used: 55	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If no for surface casing, explain in Remarks.		Setting depth shoe (ft.): 11839		Top of liner (ft.):	
				Setting depth liner (ft.):	
Hrs. waiting on cement before drill-out: 24		Calculated top of cement (ft.): 4570		Cementing date: 2-15-18	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	410	C		1167	7480
2	590	H	HALAD(R)-9 SA-1015 HR-601	706	4570
3					
Total	1000			1873	12050
II. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.):		Depth of drilled hole (ft.):		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.):		Casing weight (lbs/ft) and grade:		No. of centralizers used:	
Tapered string drilled hole size (in.)		Tapered string depth of drilled hole (ft.)			
Upper: Lower:		Upper: Lower:			
Tapered string size of casing in O.D. (in.)		Tapered string casing weight(lbs/ft) and grade		Tapered string no. of centralizers used	
Upper: Lower:		Upper: Lower:		Upper: Lower:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO		Setting depth shoe (ft.):			
Hrs. waiting on cement before drill-out:		Calculated top of cement (ft.):		Cementing date:	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0
III. CASING CEMENTING DATA					
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings					
Drilled hole size (in.):		Depth of drilled hole (ft.):		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.):		Casing weight (lbs/ft) and grade:		No. of centralizers used:	
Tapered string drilled hole size (in.)		Tapered string depth of drilled hole (ft.)			
Upper: Lower:		Upper: Lower:			
Tapered string size of casing in O.D. (in.)		Tapered string casing weight(lbs/ft) and grade		Tapered string no. of centralizers used	
Upper: Lower:		Upper: Lower:		Upper: Lower:	
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO		Setting depth tool (ft.):			
Hrs. waiting on cement before drill-out:		Calculated top of cement (ft.):		Cementing date:	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

## CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

## REMARKS

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

LOUIS GENOVESI SERVICE SUPERVISOR

Halliburton

Name and title of cementer's representative

Cementing Company

Signature

6155 W. Murphy St.

Odessa, TX, 79763

432-571-8600

2-15-18

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Katrina Boyd

Regulatory Specialist

Katrina Boyd

Typed or printed name of operator's representative

Title

Signature

1001 Fannin Street, Suite 1500

Houston, TX 77002

713-770-6568

1/29/2019

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

## Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- A. **What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.  
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- B. **How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- C. **Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.  
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- D. **Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. **Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- F. **Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. **Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.





# RAILROAD COMMISSION OF TEXAS

1701 N. Congress

P.O. Box 12967

Austin, Texas 78701-2967

Form W-15

Rev. 08/2014

## CEMENTING REPORT

Cementor: Fill in shaded areas.

Operator: Fill in other items.

OPERATOR INFORMATION	
Operator Name: FORGE ENERGY	Operator P-5 No.: 276868
Cementor Name: HALLIBURTON	Cementor P-5 No.: 347151

WELL INFORMATION		
District No.: 08	County: WINKLER	
Well No.: 4H	API No.: 495-34008	Drilling Permit No.: 833905
Lease Name: UL 21 BIGHORN	Lease No.:	
Field Name: Phantom (Wolfcamp)	Field No.: 71052900	

I. CASING CEMENTING DATA		
Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input checked="" type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.): 6	Depth of drilled hole (ft.): 22188	Est. % wash-out or hole enlargement: 20
Size of casing in O.D. (in.): 4 1/2	Casing weight (lbs/ft) and grade: 13.5# hcp-110	No. of centralizers used: 20
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.): 22176	Top of liner (ft.): 10500
		Setting depth liner (ft.): 21665
Hrs. waiting on cement before drill-out: 2	Calculated top of cement (ft.): 10975	Cementing date: 3/24/2011

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	940	PREMIUM PLUS		1149	2378
2					
3					
Total	940			1149	2378

II. CASING CEMENTING DATA		
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:
Tapered string drilled hole size (in.) Upper: Lower:	Tapered string depth of drilled hole (ft.) Upper: Lower:	
Tapered string size of casing in O.D. (in.) Upper: Lower:	Tapered string casing weight (lbs/ft) and grade Upper: Lower:	Tapered string no. of centralizers used Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth shoe (ft.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

III. CASING CEMENTING DATA		
Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:
Tapered string drilled hole size (in.) Upper: Lower:	Tapered string depth of drilled hole (ft.) Upper: Lower:	
Tapered string size of casing in O.D. (in.) Upper: Lower:	Tapered string casing weight (lbs/ft) and grade Upper: Lower:	Tapered string no. of centralizers used Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth tool (ft.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:

SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total	0			0	0

## CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

## REMARKS

CIRCULATED 80 BBLs OF CONTAMINATED SPACER AND 30 BBLs OF GOOD SPACER BACK TO SURFACE

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

FRANKIE GARCIA

Halliburton

Name and title of cementer's representative

Cementing Company

Signature

2311 S. First St.

Artesia, NM, 88210

575-392-0700

3/24/2018

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Katrina Boyd

Regulatory Specialist

Signature

Typed or printed name of operator's representative

1001 Fannin Street Suite 1500

Houston, TX 77002

713-770-6568

1/29/2019

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

## Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- A. What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
- The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- B. How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- C. Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
- To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p\\_dir=&p\\_rloc=&p\\_tloc=&p\\_ploc=&pg=1&p\\_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- D. Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- F. Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.



Tracking No.: 205297

This facsimile L-1 was generated electronically from data submitted to the RRC.

Instructions

**When to File Form L-1:**

- with Forms G-1, W-2, and GT-1 for new and deepened gas, oil, and geothermal wells
- with Form W-3 for plugged dry holes
- when sending in a log which was held under a request for confidentiality and the period for confidentiality has not yet expired.

**When is Form L-1 NOT required:**

- with Forms W-2, G-1, and GT-1 filed for injection wells, disposal wells, water supply wells, service wells, re-test wells, re-classifications, and plugbacks of oil, gas or geothermal wells
- with Form W-3 for plugging of other than a dry hole

**Where to File Form L-1:**

- with the appropriate Commission district office

**Filling out Form L-1:**

- Section I and the signature section must be filled out for all wells
- complete only the appropriate part of Section II

**Type of log required:**

- any wireline survey run for the purpose of obtaining lithology, porosity, or resistivity information
- no more than one such log is required but it must be of the subject well
- if such log is NOT run on the subject well, do NOT substitute any other type of log; just select Section II, Part A below

SECTION I. IDENTIFICATION

Operator Name: OASIS PETROLEUM PERMIAN LLC	District No. 08	Completion Date: 06/12/2018
Field Name PHANTOM (WOLFCAMP)	Drilling Permit No. 833905	
Lease Name UL 21 BIGHORN D 21-31-19	Lease/ID No. 51497	Well No. 5104H
County WINKLER	API No. 42- 495-34008	

SECTION II. LOG STATUS (Complete either A or B)

☐ A. BASIC ELECTRIC LOG NOT RUN

☒ B. BASIC ELECTRIC LOG RUN. (Select one)

- ☒ 1. Confidentiality is requested and a copy of the header for each log that has been run on the well is attached.
- ☐ 2. Confidentiality already granted on basic electric log covering this interval (applicable to deepened wells only).
- ☐ 3. Basic electric log covering this interval already on file with Commission (applicable to deepened wells only).
- ☐ 4. Log attached to (select one):

☐ (a) Form L-1 (this form). If the company/lease name on log is different from that shown in Section I, please enter name on log here: \_\_\_\_\_

Check here if attached log is being submitted after being held confidential. ☐

☐ (b) Form P-7, Application for Discovery Allowable and New Field Designation.

☐ (c) Form W-4, Application for Multiple Completion:

Lease or ID No(s). \_\_\_\_\_

Well No(s). \_\_\_\_\_

Katrina Boyd

Signature

OASIS PETROLEUM PERMIAN LLC

Name (print)

Title

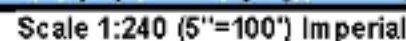
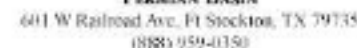
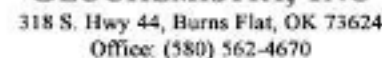
(432) 999-6778

Phone

01/29/2019

Date

-FOR RAILROAD COMMISSION USE ONLY-



UL 21 Bighorn 4H ST-1  
Winkler County  
Region: TX  
Drilling Completed: 3/20/18  
Lat: 31.696520  
Long: -103.245281  
Geologist: Matthew Zauner  
Crown Analyst: Neal Bello

Bottom Hole Coordinates: 2766' 5150' To: 22162' K.B. Elevation (ft): 2791' Total Depth (ft): 22162' Start Date: 2/3/2018  
Ground Elevation (ft): 2766' Logged Interval (ft): 5150' Formation: API#42-495-34008 End Date: 3/20/2018  
Type of Drilling Fluid: WBM/MS# 2012/H&P 602/Impac Logging Equipment

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

[illegible]

# CERTIFICATE OF COMPLIANCE AND TRANSPORTATION AUTHORITY

P-4

This facsimile P-4 was generated electronically from data submitted to the RRC.

A certification of the automated data is available in the RRC's Austin office.

Tracking No.: 205297

1. Field name exactly as shown on proration schedule <b>PHANTOM (WOLFCAMP)</b>		2. Lease name as shown on proration schedule <b>UL 21 BIGHORN D 21-31-19</b>					
3. Current operator name exactly as shown on P-5 Organization Report <b>OASIS PETROLEUM PERMIAN LLC</b>		4. Operator P-5 no. <b>617484</b>	5. Oil Lse/Gas ID no <b>51497</b>	6. County <b>WINKLER</b>	7. RRC district <b>08</b>		
8. Operator address including city, state, and zip code <b>1001 FANNIN STREET STE 1500 HOUSTON, TX 77002</b>		9. Well no(s) (see instruction E) <b>5104H</b>					
12. Purpose of Filing. (Complete section a or b below.) (See instructions B and G) <b>a. Change of:</b> <input type="checkbox"/> operator <input type="checkbox"/> oil or condensate gatherer <input type="checkbox"/> gas gatherer <input type="checkbox"/> gas purchaser <input type="checkbox"/> gas purchaser system code <input type="checkbox"/> field name from _____ <input type="checkbox"/> lease name from _____ --- OR --- <b>b. New RRC Number for:</b> <input checked="" type="checkbox"/> oil lease <input type="checkbox"/> gas well <b>Due to:</b> <input checked="" type="checkbox"/> new completion or recompletion <input type="checkbox"/> reclass oil to gas <input type="checkbox"/> reclass gas to oil <input type="checkbox"/> other well (specify) _____ <input type="checkbox"/> consolidation, unitization, or subdivision (oil lease only)		10. Classification <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> Other (see instruction A)		11. Effective Date <b>06/12/2018</b>			
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). (See instruction G).							
Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left (Attach an additional sheet in same format if more space is needed)			Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
X	X	TARGA DELAWARE LLC(836022)			0001	100.0	
14. Authorized OIL or CONDENSATE Gatherer(s). (See instruction G).							
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First (Attach an additional sheet in same format if more space is needed)						Percent of Take	
PE LOGISTICS LLC(646847)						100.0	
<b>RRC USE ONLY:</b> Reviewer's initials: <u>RRC Staff</u> Approval date: <u>06/06/2019</u>							
<b>15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING.</b> Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.							
Name of Previous Operator _____ Name (print) _____ Title _____				Signature <input type="checkbox"/> <b>Authorized Employee of previous operator</b> <input type="checkbox"/> <b>Authorized agent of previous operator (see instruction G)</b> _____ Date _____ Phone with area code _____			
<b>16. CURRENT OPERATOR CERTIFICATION.</b> By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.							
<b>OASIS PETROLEUM PERMIAN LLC</b> Name (print) _____ Title <b>KBOYD@OASISPETROLEUM.COM</b> E-mail Address (optional) _____				<b>Katrina Boyd</b> Signature <input checked="" type="checkbox"/> <b>Authorized Employee of current operator</b> <input type="checkbox"/> <b>Authorized agent of current operator (see instruction G)</b> _____ Date <b>01/29/2019</b> Phone with area code <b>(432) 999-6778</b>			

# RAILROAD COMMISSION OF TEXAS

**1701 N. Congress  
P.O. Box 12967  
Austin, Texas 78701-2967**

Form P-16

Page 1

Rev. 01/2016

## Acreage Designation

## SECTION I. OPERATOR INFORMATION

<b>Operator Name:</b> Oasis Petroleum Permian LLC	<b>Operator P-5 No.:</b> 617484
<b>Operator Address:</b> 1001 Fannin St Suite 1500, Houston, TX 77002	

## SECTION II. WELL INFORMATION

<b>District No.:</b> 08	<b>County:</b> Winkler	<b>Purpose of Filing:</b> <input type="checkbox"/> Drilling Permit Application (Form W-1) <input checked="" type="checkbox"/> Completion Report (Form G-1/W-2)
<b>Well No.:</b> 5104H	<b>API No.:</b> 495-34008	
<b>Total Lease Acres:</b> 1281.4	<b>Drilling Permit No.:</b> 833905	
<b>Lease Name:</b> UL 21 BIGHORN D 21-31-19	<b>Lease No.:</b>	
<b>Field Name:</b> Phantom (Wolfcamp)	<b>Field No.:</b> 71052900	

Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

**SECTION III. LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER**

[illegible]

Total Well Count >	1	640.7	< A. Total Assigned Horiz. Acreage	640.7	< C. Total Assigned Acreage
		640.7	< Total Remaining Horiz. Acreage	640.7	< Total Remaining Acreage
			< B. Total Assigned Vert./Dir. Acreage		
			< Total Remaining Vert./Dir. Acreage		

## SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)

### New Allocated Well

Attach Additional Pages As Needed. ☐ No additional pages ☐ Additional Pages: 1 (No. of additional pages)

CERTIFICATION: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that this report was prepared by me or under my supervision or direction, that I am authorized to make this report, and that the information contained in this report is true, correct, and complete to the best of my knowledge.

Katrina Boyd

Katrina Boyd Regulatory Specialist I

Signature

Name and title (type or print)

Email (include email address *only* if you affirmatively consent to its public release)

1001 Fannin Street, Suite 1500

Houston TX 77002

713

770-6568

1/29/2019

---

**Address**

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.



## SECTION VII. REMARKS

## GROUNDWATER PROTECTION DETERMINATION

Form GW-2



## Groundwater Advisory Unit

**Date Issued:** 14 December 2017**GAU Number:** 185102**Attention:** FORGE ENERGY, LLC  
15727 ANTHEM PKWY STE 501  
SAN ANTONIO, TX 78249**Operator No.:** 276868**API Number:**  
**County:** WINKLER  
**Lease Name:** UL 21 BIGHORN  
**Lease Number:**  
**Well Number:** 4H  
**Total Vertical Depth:** 12500  
**Latitude:** 31.696390  
**Longitude:** -103.244835  
**Datum:** NAD27**Purpose:** New Drill**Location:** Survey-UL; Block-21; Section-31

To protect usable-quality groundwater at this location, the Groundwater Advisory Unit of the Railroad Commission of Texas recommends:

The interval from the land surface to the base of the Alluvium, which is estimated to occur at a depth of 650 feet, must be protected.

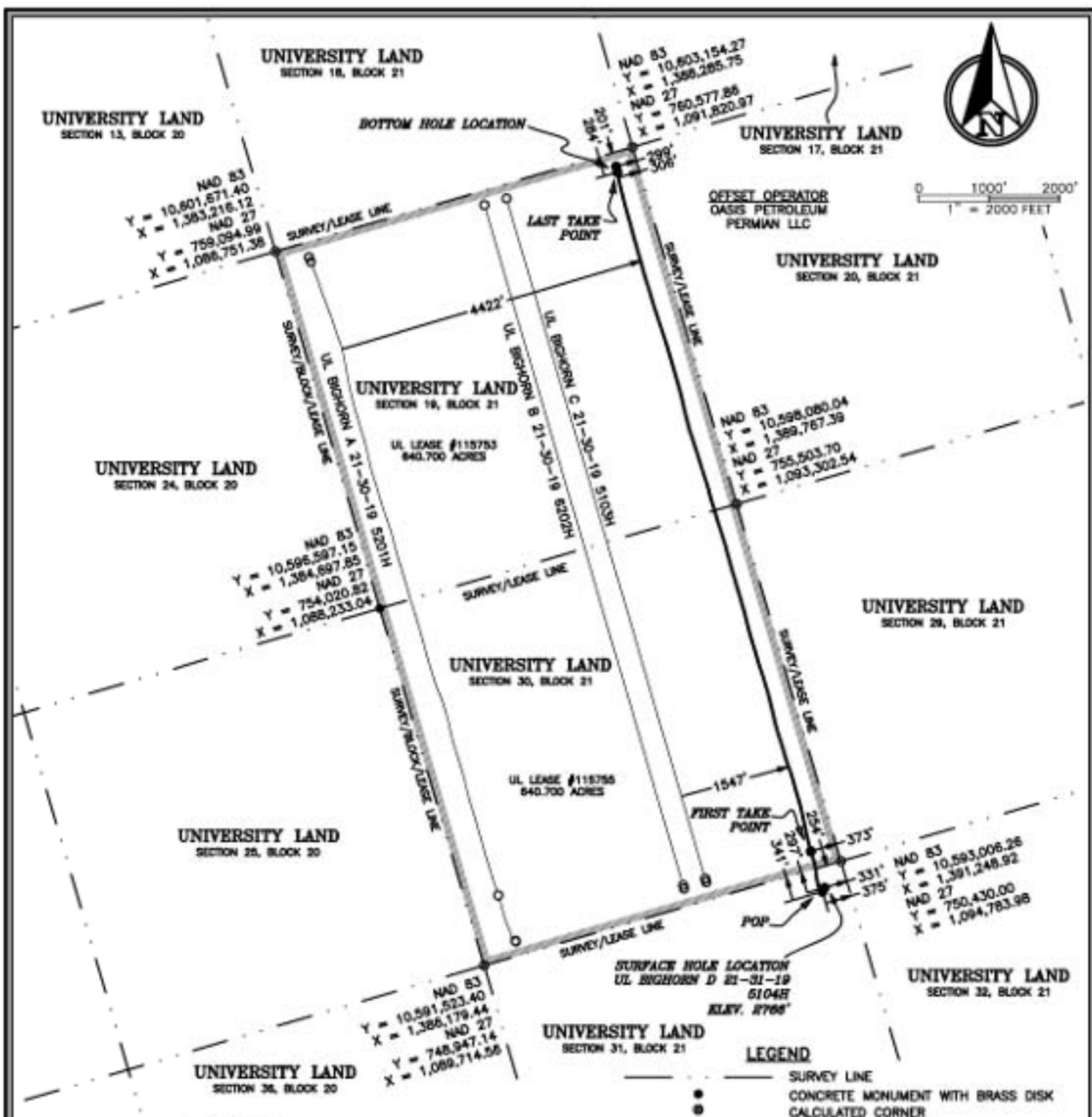
This recommendation is applicable for all wells drilled in this Section 31.

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).

This determination is based on information provided when the application was submitted on 12/07/2017. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

Groundwater Advisory Unit, Oil and Gas Division

Form GW-2      P.O. Box 12967   Austin, Texas   78771-2967      512-463-2741      Internet address: [www.rrc.texas.gov](http://www.rrc.texas.gov)  
Rev. 02/2014



#### GENERAL NOTES

- COORDINATES SHOWN ARE BASED ON TEXAS PLANE COORDINATE SYSTEM OF NAD 27, TEXAS CENTRAL ZONE 4203
- VERTICAL DATUM IS NAVD 83
- LATITUDE AND LONGITUDE ARE NAD 27 AS SHOWN
- AREA, DISTANCES, AND COORDINATES ARE "GRID"
- UNITS ARE UNITED STATES SURVEY FOOT
- ALL LEASE AND TRACT INFORMATION SHOWN HERE ON IS DONE SO BY LIMITED DEED RECORD INFORMATION ONLY. ALL ACRESAGES SHOWN ARE BY DEED AND LEASE CALL, EXCEPT WHERE NOTED. THIS IS NOT IN ANY WAY A "BOUNDARY SURVEY".

#### DRIVING DIRECTIONS TO LOCATION:

FROM THE INTERSECTION OF STATE HIGHWAY 115 AND FM 1232 IN WINK, HEAD NORTHWEST ON FM 1232 FOR 1.5 MILES THEN TURN LEFT (WEST) ONTO CR 201. HEAD WEST ON CR 201 FOR 6.8 MILES AND TURN LEFT (SOUTH) ON A LEASE ROAD. HEAD SOUTH ON LEASE ROAD FOR 3.0 MILES AND THE LOCATION WILL BE APPROXIMATELY 1.5 MILES ON THE LEFT (EAST).

I HEREBY STATE THAT THIS PLAT SHOWS THE SUBJECT SURFACE LOCATION AS STAKED ON THE GROUND.

*Allen W. Pelouquin*  
 ALLEN W. PELOQUIN  
 REGISTERED PROFESSIONAL LAND SURVEYOR  
 STATE OF TEXAS NO. 5998



#### WELL LOCATION INFORMATION:

<b>SURFACE HOLE LOCATION:</b> NAD 83, TEXAS CENTRAL ZONE COORDS Y = 30,550,627.65, X = 1,391,094.31 LAT: N 31.69637°, LONG: W 103.24538° TYP: 331' FELL & 297' FRL	<b>LAST TAKE POINT:</b> NAD 83, TEXAS CENTRAL ZONE COORDS Y = 10,602,755.01, X = 1,388,071.21 LAT: N 31.72425°, LONG: W 103.25560° TYP: 306' FELL & 284' FRL
NAD 27, TEXAS CENTRAL ZONE COORDS Y = 750,081.05, X = 1,094,549.63 LAT: N 31.69637°, LONG: W 103.24484°	NAD 27, TEXAS CENTRAL ZONE COORDS Y = 750,258.87, X = 1,095,806.87 LAT: N 31.72425°, LONG: W 103.25515°
<b>POP:</b> NAD 83, TEXAS CENTRAL ZONE COORDS Y = 30,540,575.75, X = 1,390,983.92 LAT: N 31.69637°, LONG: W 103.24538° TYP: 375' FELL & 341' FRL	<b>BOTTOM HOLE LOCATION:</b> NAD 83, TEXAS CENTRAL ZONE COORDS Y = 10,602,877.30, X = 1,388,054.41 LAT: N 31.72447°, LONG: W 103.25560° TERMINUS: 299' FELL & 201' FRL TERMINUS: 299' FELL & 201' FRL
NAD 27, TEXAS CENTRAL ZONE COORDS Y = 749,987.35, X = 1,094,519.44 LAT: N 31.69637°, LONG: W 103.24484°	NAD 27, TEXAS CENTRAL ZONE COORDS Y = 750,302.16, X = 1,095,590.06 LAT: N 31.72425°, LONG: W 103.25522°
<b>FIRST TAKE POINT:</b> NAD 83, TEXAS CENTRAL ZONE COORDS Y = 30,540,645.12, X = 1,390,889.71 LAT: N 31.69637°, LONG: W 103.24538° TYP: 375' FELL & 341' FRL	
NAD 27, TEXAS CENTRAL ZONE COORDS Y = 750,089.11, X = 1,094,555.23 LAT: N 31.69637°, LONG: W 103.24538°	

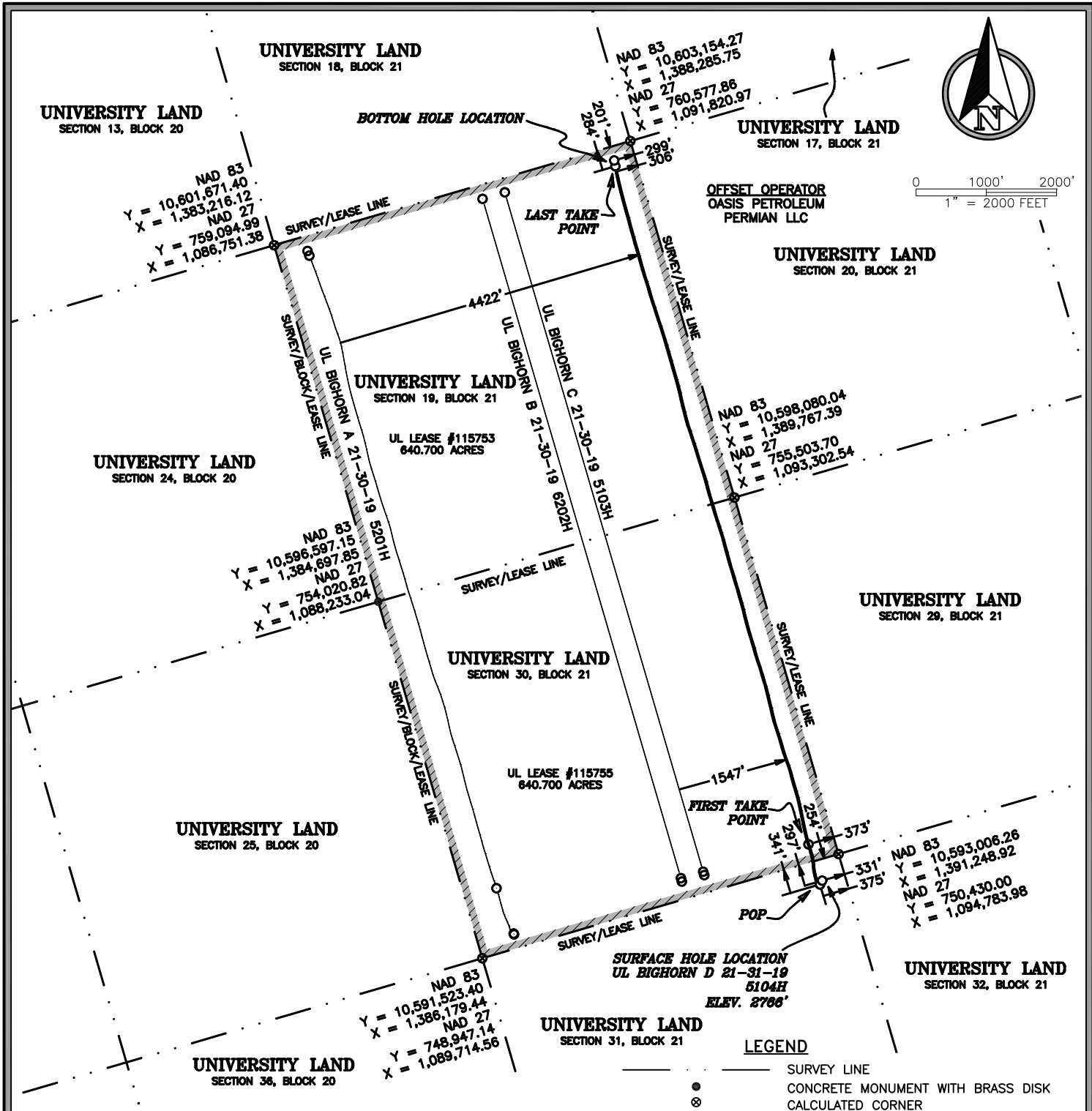
#### PLAT OF: AN AS-DRILLED WELL LOCATION FOR: OASIS PETROLEUM PERMIAN LLC. UL BIGHORN D 21-31-19 5104H

SITUATED IN THE UNIVERSITY LAND, SECTION 19, BLOCK 21, SECTION 30, BLOCK 21, AND SECTION 31, BLOCK 21 BEING APPROXIMATELY 7.0 MILES SOUTHWEST OF WINK IN WINKLER COUNTY, TEXAS.

**F8C INC**  
 SURVEYORS+ENGINEERS

550 Bailey Ave., 205 - Fort Worth, TX 76107  
 PH: 817.349.9800 - FAX: 979.732.5271  
 TBP: Firm 17957 | TBP: Firm 10193887  
 www.f8cinc.net

DATE: 11-14-2018  
 DRAWN BY: BC/JP/AY/CH  
 CHECKED BY: AP  
 FIELD CREW: EC-PI  
 PROJECT NO: 2017091618  
 SCALE: 1" = 2000'  
 SHEET: 1  
 REVISION: 1



PLAT OF:  
AN AS-DRILLED WELL LOCATION FOR:  
**OASIS PETROLEUM PERMIAN LLC.**  
UL BIGHORN D 21-31-19 5104H  
SITUATED IN THE UNIVERSITY LAND, SECTION 19, BLOCK 21, SECTION 30, BLOCK 21, AND SECTION 31, BLOCK 21  
BEING APPROXIMATELY 7.0 MILES SOUTHWEST OF WINK IN WINKLER COUNTY, TEXAS.

DATE: 11-14-2018  
DRAWN BY: BC/RP/AP/CH  
CHECKED BY: AP  
FIELD CREW: RE-PH  
PROJECT NO: 2017091638  
SCALE: 1" = 2000'  
SHEET: 1  
REVISION: 1

FSC INC  
SURVEYORS+ENGINEERS  
550 Bailey Ave., 205 - Fort Worth, TX 76107  
Ph: 817.349.9800 - Fax: 979.732.5271  
TBPE Firm 17957 | TBPLS Firm 10193887  
www.fscinc.net  
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