INVOICE



DATE	INVOICE#	
3/10/2014	4608	

BILL TO

SANDRIDGE ENERGY, INC. ATTN: PURCHASING MANAGER 123 ROBERT S. KERR AVENUE OKLAHOMA CITY, OK 73102 REMIT TO

EDGE SERVICES, INC. PO BOX 609 WOODWARD, OK 73802

COUNTY	STARTING D	WORK ORDER	RIG NUMBER	LEASE NAME	Terms
COMANCHE,	3/7/2014	3507	HORIZON 4	IRIS 3120 2-12 H	Due on rec

Description

DRILLED 100' OF 30" CONDUCTOR HOLE
DRILLED 6' OF 76" HOLE
FURNISHED AND SET 6' X 6' TINHORN CELLAR
FURNISHED 100' OF 20" CONDUCTOR PIPE
FURNISHED MUD, WATER, AND TRUCKING
FURNISHED WELDER AND MATERIALS
FURNISHED 10 YARDS OF 10 SACK GROUT
FURNISHED3 YARDS OF 10 SACK GROUT
FURNISHED GROUT PUMP
DRILL MOUSE HOLE
FURNISHED 25' OF 16" CONDUCTOR PIPE

TOTAL BID \$18,133.27

Sales Tax (6.15%)

\$133.27

TOTAL

\$18,133.27

Operator Name:

SANDRIDGE ENERGY INC EBUSINESS

Well Name: Iris 3120 2-12H

March 19, 2014



Pump Schedule

9 5/8 " Surface

Fluid #	Fluid Type - Name	Surface Density (lb/gal)	Estimated Avg. Rate (bbl/min)		Water Required (bbl.)
Spacer 1	Fresh Water	8.34	5	10.0	10.0
Lead 1	ALLIED LIGHT WEIGHT CEMENT: TYPE 1 -	12.70	5	98.4	70.6
Tail 1	CLASS A COMMON	15.60	5	32.0	18.6
Displacement 1	Displacement	8.33	5	66.3	66.3

TOTALS

206.7

165.6

Estimated pump time @ 4 bpm Estimated pump time @ 8 bpm

0.86

hrs

0.43

hrs

Fluids Design

9 5/8 " Surface

Spacer 1 Fresh Water

Fluid Density:

8.34 lb/gal

Fluid Volume:

10.0 bbls

Lead 1 ALLIED LIGHT WEIGHT CEMENT: TYPE 1 - CLASS A

65:35 Class A:Poz blend, 6% Gel 2% BWOC Calcium Chloride 0.25 lb/sk Flo-Seal (Polyflake LCM)

Slurry Density: Slurry Yield:

12.70 lb/gal 1.87 ft3/sk

Mixing Water Total sacks

10.05 gal/sk 295 sks

Total barrels

98.4 bbls

Tail 1 CLASS A COMMON

100% Class A - Neat

2% BWOC Calcium Chloride 0.25 lb/sk Flo-Seal (Polyflake LCM) Slurry Density: Slurry Yield:

15.60 lb/gal

Mixing Water

1.20 ft³/sk 5.22 gal/sk

Total sacks Total barrels

150 sks 32.0 bbls

Displacement 1 Displacement

Fluid Density:

8.33 lb/gal

Fluid Volume:

66.3 bbls



SandRidge Energy Iris #3120 2-12H Comanche County, KS.

1.0 Executive Summary

Allied Oil & Gas Services would like to thank you, for the award of the provision of cementing products and services on the well Iris #3120 2-12H Casing.

A pre-job meeting was held to discuss job details, review the safety hazards, potential environmental impact and established emergency procedures.

Allied started the job testing lines to 3000 psi. After a successful test we began the job by pumping 30 bbls of preflush spacer. We then mixed and pumped the following cements:

60 Bbls (240 sacks) of 13.6 ppg Lead slurry: 50:50 Class A:Poz Blend - 1.4 Yield 2.0% Gel 0.4% FL-160 0.1% SA-51

21Bbls (100 sacks) of 15.6 ppg Tail slurry: Class A - 1.18 Yield 0.8% FL-160 0.2% CD-31

The top plug was then released and displaced with 227 of fresh water. The plug bumped and pressured up to 1600 psi. Pressure was released and floats held.

All real time data is shown on the graph in the attachment section.

Allied Oil & Gas Services remains committed to provide operational excellence and superior product performance. All comments and suggestions are greatly appreciated and help us to continue to provide this level of service.

Again we want to thank you for the opportunity to perform these and your future cementing & acidizing service needs.