

CEMENT DATA:

Spacer Type: \_\_\_\_\_  
 Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

LEAD: Pump Time \_\_\_\_\_ hrs. Type ALW 45/35 679 gal 145 ft  
610000 PSI 330.6 - 170, 14 lb 312 gal Excess \_\_\_\_\_

Amt. 180 Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

Pump Time 700 hrs. Type \_\_\_\_\_ Excess \_\_\_\_\_

Amt. 405 Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

WATER: Lead \_\_\_\_\_ gals/sk Tail \_\_\_\_\_ gals/sk Total \_\_\_\_\_ Bbls.

Pump Trucks Used 566-281

Bulk Equip. 891

373

Float Equip: Manufacturer \_\_\_\_\_

Shoe: Type AF1 Depth \_\_\_\_\_

Float: Type \_\_\_\_\_ Depth \_\_\_\_\_

Centralizers: Quantity 50 Plugs Top \_\_\_\_\_ Btm. \_\_\_\_\_

Stage Collars \_\_\_\_\_

Special Equip. 3000 lbs

Disp. Fluid Type H<sub>2</sub>O Amt. 59 Bbls. Weight \_\_\_\_\_ PPG

Mud Type Big Round 59 Weight \_\_\_\_\_ PPG

Water H<sub>2</sub>O 47

CEMENTER AL

Date 12/12/15 District Dakota N Ticket No. 007713  
 Company San Marcos Exp Rig 4007  
 Lease Subroad Well No. 1  
 County Sioux State SD  
 Location \_\_\_\_\_ Field \_\_\_\_\_

CASING DATA: Conductor  PTA  Squeeze  Misc   
 Surface  Intermediate  Production  Liner   
 Size 5 1/2 Type ALW Weight \_\_\_\_\_ Collar \_\_\_\_\_

Casing Depths: Top 146 Bottom \_\_\_\_\_

Drill Pipe: Size 4 1/2 Weight \_\_\_\_\_ Collars \_\_\_\_\_

Open Hole: Size 7 7/8 T.D. \_\_\_\_\_ ft. P.B. to \_\_\_\_\_ ft.

CAPACITY FACTORS:

Casing: Bbls/Lin. ft. 0.8 Lin. ft./Bbl. \_\_\_\_\_

Open Holes: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_

Drill Pipe: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_

Annulus: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_

Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_

Perforations: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Amt. \_\_\_\_\_

COMPANY REPRESENTATIVE \_\_\_\_\_

TIME AM/PM	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
						Calculation, 473, net, 5 days
						Analysis Circulate
				20.0	8.0	Mix - Pump - Flush
				20.0	8.0	Mix - Pump - Flush
				22.0	5.0	Mix 180 SK BSL
				47.0	8.0	Wash Tank
	700			59	8.0	Displace H <sub>2</sub> O
	1800					Displace Big Round
	800					Lead Plug
				5.0	2 1/2	Open Tool - Circulate 3 hrs
				24.2	3 1/2	Mix - Plug RT# 30
	300			105.0	5.0	Mix ALW 45/35 512 - 360 - 312
						Wash Tank
	900			59.0	7.0	Displace H <sub>2</sub> O
	2100					Lead Plug
						Tool Closed Cement did Circulate
						Thank U