Submit within 45 da	ys of	State of New Mexico			Revised February 15, 2012				
well completion		Energy,	Minerals and		1. WELL API NO. 30-025-38969				
		Natural Resources			2. Well Name:				
Oil Conservation Division					PATTERSON B 52 FEDERAL #002A				
1220 S. St Francis Dr. Santa Fe, NM 87505					3. Well Number: 002A				
HYDRAULIC FRACTURING FLUID DISCLOSURE					Surface Hole Location:     Unit:A Lot:A Section:5 Township:198 Range:32E				
Victor School					Feet from: 330 N/S Line: N				
⊠ Original					5. Bottom Ho		E/W Line	:E	
☐ Amendment						Unit:D Lot:D Section:5 Township:19S Range:32E Feet from:410 N/S Line:N			
					Feet from:4		E/W Line	22.530	
					6. latitude:	2.69583483		ongitude:	
						2.09303403		03.780955524088	
					7. County:	a			
8. Operator Name an	nd Address:				9. OGRID:		10 Phon	o Number	
COG OP	ERATING LLC				9. OGRID: 10. Phone Number: 432-685-4332				
	icho Center Iinois Ave								
Midland 79701									
11. Last Fracture Dat	e: 12/7/201	12 Frac Perform	ned by: Halliburton		12. Production Type:				
13. Pool Code(s):					14. Gross Fractured Interval:				
41440 15. True Vertical Depth (TVD):					9,634 ft to 13,680 ft 16. Total Volume of Fluid Pumped:				
9,303 ft					58,072 bbls				
17. HYDRAULIC FL Trade Name	UID COMPOS Supplier	Purpose	Ingredients	(CAS	#) Chemical	Maximum Ir	ngredient	Maximum	
					ract Service	Concentration	on in	Ingredient Concentration in HF	
For all Mater	0					riddia ve (ri	100%	Fluid (% by mass)	
Fresh Water FE ACID - <10%	Operator Halliburton	Solvent	Hydrochloric acid	7647	7-01-0	-01-0		85.16336% 1.80611%	
HCL			\$ 100,000 Kind		14304			110000	
Premium White 20/40	Halliburton						100%	11.35796%	
CRC-16/30	Halliburton	V I I I I I	3				100%	1.1722%	
FR-38	Halliburton	Friction Reducer	Acetic acid Ammonium sulfate	64-1	9-7 fidential		5% 30%	0.0008% 0.0048%	
		reducer	Inorganic Salt		iness		30 70	0.004870	
BC-140 X2	Halliburton	Initiator	Ethylana alvasi	thylene glycol 107-2			30%	0.007250/	
BC-140 X2	Halliburton	iriluator	Ethylene glycol Monoethanolamine borate	_	38-87-9		100%	0.00735% 0.0245%	
MO-67	Halliburton	pH Control Additive	Sodium hydroxide	1310-73-2			30%	0.00064%	
BE-9	Halliburton	Biocide	Tributyl tetradecyl	8174	41-28-8		10%	0.00392%	
		1 1	phosphonium chloride						
CLA-STA XP	Halliburton	Clay	Polyepichlorohydrin,	5183	38-31-4		60%	0.07077%	
ADDITIVE		Stabilizer	trimethyl amine guaternized						
CLA-WEB™	Halliburton	Additive	Ammonium salt		fidential		50%	0.02307%	
					mess mation				
LOSURF-300	Halliburton	Surfactant	Isopropanol	67-6			60%	0.04671%	
NONIONIC SURFACTANT			Light aromatic solvent	6474	42-95-6		30%	0.02336%	
CONTROLANT			Ethoxylated		fidential		10%	0.00779%	
			nonylphenol		iness				
HpH BREAKER	Halliburton	Breaker	Sodium chloride	_	mation 7-14-5		30%	0.00081%	
SUPERSET W	Halliburton	Activator	Methanol	67-5			60%	0.01498%	
			Ethoxylated nonylphenol		fidential iness		60%	0.01498%	
	1111		11 (28)	100	mation				
3rd Party Scale Inhibitor	Operator	*3rd Party Additive	*Supplied by Operator				100%	0.00265%	
OptiKleen-WF™	Halliburton	Concentrate		10486-00-7			100%	0.00172%	
OPTIFLO-HTE	Halliburton	Breaker	Crystalline silica,	14808-60-7			30%	0.00134%	
			quartz Walnut hulls	Mixtu	ıre		100%	0.00445%	
Scalechek® SCP	Halliburton	Scale	Glassy calcium	_	97-17-3		100%	0.01675%	
-2 Scale Inhibitor		Preventer	magnesium phosphate				1 10 ( 1)		
WG-36 GELLING	Halliburton	Gelling	Guar gum	9000-30-0			100%	0.10659%	
AGENT 3rd Party Additive	Operator	Agent *3rd Party	*Supplied by				100%	0.01675%	
	Operator	Additive	Operator				85650000		
18. I, as Operator, he	ereby certify that	the information	shown on this disclosure	form is	true and com	plete to the b	est of my k	nowledge and belief.	
	igned Electro	nically I	Printed Name: Kacie C	onnal	lly	Title: P	ermitting	Tech	
Control Control Control	/1/2013 connally@cor	ncho.com							
_		-	hevond MSDS data as de	coribo	4 i= 20 CED 1	910 1200 NM	OCD dass	not require the	

MMOCD does not require the reporting of information beyond MSDS data as described in 29 CFR 1910.1200. NMOCD does not require the reporting or disclosure of proprietary, trade secret or confidential business information.