Location of spill:	COG -WD	McIntyre F	E SE		Date of Spill:	12-Sep	-2019			
	If the leak/s	pill is ass	ociated with pr	roductio	n equipment, i.e wellhead	l, stuffing box,				
	flowline, tank b	attery, pro	duction vessel, t	transfer	pump, or storage tank place	an "X" here:				
				Input	Data:	OIL:	WATER:			
		-			own enter the volumes here:	0.0 BB				
Total Area Calculations					Iculations" is optional. The above will override the calculated volumes. Standing Liquid Calculations					
Total Surface Area width	length	<u> </u>	wet soil depth	oil (%)	Standing Liquid Area	width			liquid depth	oil (%
Rectangle Area #1 50 ft	40 ft	Х	0.40 in	30%	Rectangle Area #1		X 0 ft	Х	0 in	011(7
	X Oft	X	0 in	0%	Rectangle Area #2		X 0 ft		0 in	C
	X Oft X Oft	X X	0 in 0 in	0% 0%	Rectangle Area #3 Rectangle Area #4	0 ft 0 ft	X 0 ft X 0 ft		0 in 0 in	0
	X Oft	x	0 in	0%	Rectangle Area #5				0 in	0
	X 0 ft	X	0 in	0%	Rectangle Area #6				0 in	Ō
Rectangle Area #7 0 ft	X Oft	X	0 in	0%	Rectangle Area #7	0 ft			0 in	0
Rectangle Area #8 0 ft	X 0 ft	Х	0 in	0%	Rectangle Area #8	0 ft	X 0 ft	~	0 in	0
				okay						
					DUCTION DATA REQUIRE	D				
Average Daily Production: Oil 0	BBL Water (0 BBL	0 Gas ((MCFD)	Total Hydrocarbon C	content in gas: 0	% (percentage)			
Did leak occur before the separator?:	YES	N/A	(place an "X")		H2S Content in P		0 PPM			
			U		H2S Content in	Tank Vapors:	0 PPM			
Amount of Free Liquid Recovered: 0 BBL		okay			Percentage of Oil	in Free Liquid Recovered:	% (percentage)			
Linuid balding factor *										
Liquid holding factor *: 0.14 gal p			g when the spill wet			Use the following whe	en the liquid completel			
Liquid holding factor *: 0.14 gai p	* Sa	and = 0.08 g	allon (gal.) liquid pe	er gal. volu	me of soil.	Use the following who Occurs when the spil	soaked soil is contain	ned by b	arriers, natural (or n	
Liquid noiding factor *: 0.14 gai p	- * Sa * Gr	and = 0.08 g ravelly (calicl	allon (gal.) liquid pe he) loam = 0.14 gal	er gal. volu . liquid per	me of soil. gal. volume of soil.	Use the following whe Occurs when the spil * Clay loam = 0.20 ga	soaked soil is contair I. liquid per gal. volum	ned by b ne of soi	arriers, natural (or n I.	
Liquia noiaing factor 1: 0,14, gai p	- * Sa * Gr * Sa	and = 0.08 g ravelly (calicl andy clay loa	allon (gal.) liquid pe	er gal. volu I. liquid per quid per ga	me of soil. gal. volume of soil. I. volume of soil.	Use the following whe Occurs when the spil * Clay loam = 0.20 ga * Gravelly (caliche) Ic	soaked soil is contain	ned by b ne of soi per gal. v	arriers, natural (or n l. volume of soil.	
Total Solid/Liquid Volume: 2,000 sq. f	* Sa * Gr * Sa * Cl	and = 0.08 g ravelly (calicl andy clay loa lay loam = 0.	allon (gal.) liquid pe he) loam = 0.14 gal m soil = 0.14 gal liq	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil.	Use the following whe Occurs when the spil * Clay loam = 0.20 ga * Gravelly (caliche) Ic	soaked soil is contair II. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volur	ned by b ne of soi per gal. v	arriers, natural (or n l. volume of soil.	ot).
	* Sa * Gr * Sa * Cr t. 47 cu.	and = 0.08 g ravelly (calic) andy clay loa lay loam = 0. . ft.	allon (gal.) liquid pe he) loam = 0.14 gal Im soil = 0.14 gal liq 16 gal. liquid per ga	er gal. volu I. liquid per quid per ga al. volume	ıme of soil. gal. volume of soil. I. volume of soil. of soil.	Use the following whe Occurs when the spil * Clay loam = 0.20 ga * Gravelly (caliche) lo * Sandy loam = 0.5 g Sq.	soaked soil is contair II. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volur	ned by b ne of soi per gal. v me of so	arriers, natural (or n I. volume of soil. il.	ot).
Total Solid/Liquid Volume: 2,000 sq. f	• Sa • Gr • Sa • Cl t. 47 cu. <u>H20</u>	and = 0.08 g ravelly (calici andy clay loa lay loam = 0. . ft.	allon (gal.) liquid pe he) loam = 0.14 gal m soil = 0.14 gal liq 16 gal. liquid per ga 20 cu. ft. <u>OIL</u>	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. of soil. Total Free Liquid Volume: <u>Estimated Production</u>	Use the following wh Occurs when the spil * Clay loam = 0.20 ga * Gravelly (caliche) ic * Sandy loam = 0.5 g sq. n Volumes Lost	soaked soil is contair I. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volur ft. cu <u>H20</u>	ned by b ne of soi per gal. v me of so u. ft.	arriers, natural (or n l. volume of soil. il. Cu. <u>OIL</u>	ot). ft.
Total Solid/Liquid Volume: 2,000 sq. f	* Sa * Gr * Sa * Cr t. 47 cu.	and = 0.08 g ravelly (calicl andy clay loa lay loam = 0. . ft.	allon (gal.) liquid pe he) loam = 0.14 gal m soil = 0.14 gal liq 16 gal. liquid per ga 20 cu. ft.	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. of soil. Total Free Liquid Volume:	Use the following wh Occurs when the spil * Clay loam = 0.20 ga * Gravelly (caliche) ic * Sandy loam = 0.5 g sq. n Volumes Lost	soaked soil is contair II. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volum ft. cu	ned by b ne of soi per gal. v me of so u. ft.	arriers, natural (or n l. volume of soil. il. Cu.	ot). ft.
Total Solid/Liquid Volume: 2,000 sq. f <u>Estimated Volumes Spilled</u> Liquid in Soil:	• Se • Gr • Se • Cl • t. 47 cu. H2O 1.2 BB	and = 0.08 g ravelly (calicl andy clay loa lay loam = 0. . ft.	allon (gal.) liquid pe he) loam = 0.14 gal lin 16 gal. liquid per ga 20 cu. ft. 0.5 BBL	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. of soil. Total Free Liquid Volume: <u>Estimated Production</u> Estimated Produ	Use the following wh Occurs when the spil * Clay loam = 0.20 g * Gravelly (caliche) Ic * Sandy loam = 0.5 g g n Volumes Lost uction Spilled: ce Damage	soaked soil is contain I. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volum ft. cru <u>H20</u> 0.0 Bl	ned by b ne of soi per gal. v me of so u. ft.	arriers, natural (or n l. volume of soil. il. Cu. <u>OIL</u>	ot). ft.
Total Solid/Liquid Volume: 2,000 sq. f <u>Estimated Volumes Spilled</u> Liquid in Soil: Free Liquid:	• Sa • Gr • Sa • Cl t. 47 cu. <u>H20</u> 1.2 BB <u>0.0 BB</u>	and = 0.08 g ravelly (calicl andy clay loa lay loam = 0. . ft.	allon (gal.) liquid pe he) loam = 0.14 gal m soil = 0.14 gal lic 16 gal. liquid per ga 20 cu. ft. <u>OIL</u> 0.5 BBL 0.0 BBL	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. of soil. Total Free Liquid Volume: <u>Estimated Production</u> Estimated Produ	Use the following wh Occurs when the spil * Clay loam = 0.20 gr * Gravelly (caliche) Ic * Sandy loam = 0.5 g g n Volumes Lost uction Spilled: ce Damage 2,000 sq.	soaked soil is contain I. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volum ft. cru <u>H20</u> 0.0 Bl ft.	ned by b ne of soi per gal. v me of so u. ft.	arriers, natural (or n l. volume of soil. il. Cu. <u>OIL</u>	ot).
Total Solid/Liquid Volume: 2,000 sq. f Estimated Volumes Spilled Liquid in Soil: Free Liquid: Totals:	• Sa • Gr • Sa • Cl • Cl • Cl • Cl • Cl • Cl • Cl • Cl	and = 0.08 g ravelly (calicl andy clay loa lay loam = 0. . ft.	Allon (gal.) liquid pe he) loam = 0.14 gal liq m soil = 0.14 gal liq 16 gal. liquid per ga 20 cu. ft. 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. of soil. Total Free Liquid Volume: <u>Estimated Production</u> Estimated Produ <u>Estimated Surfac</u>	Use the following wh Occurs when the spil * Clay loam = 0.20 g * Gravelly (caliche) lo * Sandy loam = 0.5 g sq. n Volumes Lost uction Spilled: ce Damage 2,000 sq. .0459 acr	soaked soil is contain I. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volum ft. cru <u>H20</u> 0.0 Bl ft.	ned by b ne of soi per gal. v me of so u. ft.	arriers, natural (or n l. volume of soil. il. Cu. <u>OIL</u>	ot). ft.
Total Solid/Liquid Volume: 2,000 sq. f <u>Estimated Volumes Spilled</u> Liquid in Soil: Free Liquid: Totals: Total Liquid Spill Liquid: <u>Recovered Volumes</u>	• Sa • Gr • Sa • Cl • Cl • Cl • Cl • Cl • Cl • Cl • Cl	and = 0.08 g aravelly (calici andy clay loa ay loam = 0. . ft.	Allon (gal.) liquid pe he) loam = 0.14 gal liq m soil = 0.14 gal liq 16 gal. liquid per ga 20 cu. ft. 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. of soil. Total Free Liquid Volume: <u>Estimated Production</u> Estimated Produ <u>Estimated Surface Area:</u> Surface Area: Surface Area:	Use the following whith Calay loam = 0.20 gr Calay loam = 0.20 gr Gravelly (caliche) lo Sq. n Volumes Lost uction Spilled: Ce Damage 2,000 sq. .0459 acr and Volumes	soaked soil is contain I. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volum ft. cru H2O 0.0 Bl ft.	hed by b he of soi ber gal. v me of so u. ft.	arriers, natural (or n l. volume of soil. il. cu. <u>OIL</u> 0.0 BBI	ot). ft.
Total Solid/Liquid Volume: 2,000 sq. f <u>Estimated Volumes Spilled</u> Liquid in Soil: Free Liquid: Totals: Total Liquid Spill Liquid:	• Sa • Gr • Sa • Cl • Cl • Cl • Cl • Cl • Cl • Cl • Cl	and = 0.08 g ravelly (calicl andy clay loa lay loam = 0. . ft.	Allon (gal.) liquid pe he) loam = 0.14 gal m soil = 0.14 gal 16 gal. liquid per ga 20 cu. ft. 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. of soil. Total Free Liquid Volume: <u>Estimated Production</u> Estimated Produ <u>Estimated Surface Area:</u> Surface Area:	Use the following whith Calva loam = 0.20 gr Calva loam = 0.20 gr Gravelly (caliche) loa Squ n Volumes Lost uction Spilled: Ce Damage 2,000 sq. .0459 acr and Volumes	soaked soil is contain I. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volum ft. ct <u>H20</u> 0.0 Bl ft. e 67 ct	ned by b ne of soi per gal. v ne of so u. ft. BL	arriers, natural (or n l. volume of soil. il. Cu. <u>OIL</u>	ot). ft.
Total Solid/Liquid Volume: 2,000 sq. f <u>Estimated Volumes Spilled</u> Liquid in Soil: Free Liquid: Totals: Total Liquid Spill Liquid: <u>Recovered Volumes</u> Estimated oil recovered: BBL	• Sa • Gr • Sa • Cl • Cl • Cl • Cl • Cl • Cl • Cl • Cl	and = 0.08 g and call (calicit andy claid value andy loam = 0. ft. ft. iL iL iL iL iL iL iL iL iL iL iL iL iL	Allon (gal.) liquid pe he) loam = 0.14 gal m soil = 0.14 gal 16 gal. liquid per ga 20 cu. ft. 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. of soil. Total Free Liquid Volume: <u>Estimated Production</u> Estimated Produ <u>Estimated Surface Area:</u> Surface Area: Surface Area: <u>Estimated Weights,</u> Saturated Soil =	Use the following wh Occurs when the spil * Clay loam = 0.20 g * Gravelly (caliche) Ic * Sandy loam = 0.5 g sq. n Volumes Lost uction Spilled: ce Damage 2,000 sq. .0459 acr and Volumes 7,467 lbs 2 BBi	soaked soil is contain I. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volum ft. cu <u>H2O</u> 0.0 Bl ft. p 67 ct _ 70 ga	ned by b ne of soi per gal. v ne of so u. ft. BL	arriers, natural (or n l. rolume of soil. il. Cu. OIL 0.0 BBI	ot). ft.
Total Solid/Liquid Volume: 2,000 sq. f Estimated Volumes Spilled Liquid in Soil: Free Liquid: Free Liquid: Total Liquid Spill Liquid: Totals: Total Liquid Spill Liquid: BBL Estimated oil recovered: BBL Estimated water recovered: BBL Air Emission from flowline leaks: Volume of oil spill: Volume of oil spill: BBL	• Sa • Gr • Sa • Cl • Cl • Cl • Cl • Cl • Cl • Cl • Cl	and = 0.08 g and call (calicit andy claid value andy loam = 0. ft. ft. iL iL iL iL iL iL iL iL iL iL iL iL iL	Allon (gal.) liquid pe he) loam = 0.14 gal m soil = 0.14 gal 16 gal. liquid per ga 20 cu. ft. 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. of soil. Total Free Liquid Volume: Estimated Production Estimated Production Estimated Production Estimated Production Estimated Production Estimated Production Estimated Production Estimated Production Surface Area: Surface Area: Surface Area: Surface Area: Surface Area: Surface Area: Surface Area: Saturated Soil = Total Liquid =	Use the following whe Occurs when the spil * Clay loam = 0.20 gs * Gravelly (caliche) ic * Sandy loam = 0.5 g sq. n Volumes Lost uction Spilled: ce Damage 2,000 sq. .0459 acr and Volumes 7,467 lbs 2 BBI ng Requirements New Mexico	soaked soil is contain I. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volum ft. ct H2O 0.0 Bl ft. e 67 ct - 70 ga <u>E</u>	ned by b ne of soi ne of so u. ft. BL J. ft. allon	arriers, natural (or n l. rolume of soil. il. Cu. OIL 0.0 BBI	ot). ft. yds.
Total Solid/Liquid Volume: 2,000 sq. f Estimated Volumes Spilled Liquid in Soil: Free Liquid: Totals: Total Liquid Spill Liquid: Totals: Total Liquid Spill Liquid: Estimated oil recovered Volumes Estimated oil recovered: BBL Estimated water recovered: BBL Air Emission from flowline leaks: Volume of oil spill: BBL	• Sa • Gr • Sa • Cl • Cl • Cl • Cl • Cl • Cl • Cl • Cl	and = 0.08 g and call (calicit andy claid value andy loam = 0. ft. ft. iL iL iL iL iL iL iL iL iL iL iL iL iL	Allon (gal.) liquid pe he) loam = 0.14 gal m soil = 0.14 gal 16 gal. liquid per ga 20 cu. ft. 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. Total Free Liquid Volume: <u>Estimated Production</u> Estimated Produ <u>Estimated Surfac</u> Surface Area: Surface Area: Surface Area: Surface Area: Surface Area: <u>Estimated Weights</u> , Saturated Soil = Total Liquid = <u>Air Emission of Reporti</u> HC gas release reportable?	Use the following whe Occurs when the spil * Clay loam = 0.20 gs * Gravelly (caliche) Ic * Sandy loam = 0.5 g sq. n Volumes Lost uction Spilled: ce Damage 2,000 sq. .0459 acr and Volumes 7,467 lbs 2 BBI	soaked soil is contain I. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volum ft. cu H2O 0.0 Bi ft. = 67 ct - 70 ga <u>11</u>	ned by b ne of soi ne of soi J. ft. BL J. ft. BL	arriers, natural (or n l. rolume of soil. il. Cu. OIL 0.0 BBI	ot). ft.
Total Solid/Liquid Volume: 2,000 sq. f Estimated Volumes Spilled Liquid in Soil: Free Liquid: Free Liquid: Total Liquid Spill Liquid: Totals: Total Liquid Spill Liquid: Estimated oil recovered Volumes Estimated oil recovered: BBL Estimated water recovered: BBL Molume of oil spill: - Volume of oil spill: - Separator gas calculated: - MCF Separator gas released: Separator gas released: -	• Sa • Gr • Sa • Cl • Cl • Cl • Cl • Cl • Cl • Cl • Cl	and = 0.08 g and call (calicit andy claid value andy loam = 0. ft. ft. iL iL iL iL iL iL iL iL iL iL iL iL iL	Allon (gal.) liquid pe he) loam = 0.14 gal m soil = 0.14 gal 16 gal. liquid per ga 20 cu. ft. 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. of soil. Total Free Liquid Volume: Estimated Production Estimated Production Estimated Production Estimated Production Estimated Production Estimated Production Estimated Production Estimated Production Surface Area: Surface Area: Surface Area: Surface Area: Surface Area: Surface Area: Surface Area: Saturated Soil = Total Liquid =	Use the following whe Occurs when the spil * Clay loam = 0.20 gs * Gravelly (caliche) Ic * Sandy loam = 0.5 g sq. n Volumes Lost uction Spilled: ce Damage 2,000 sq. .0459 acr and Volumes 7,467 lbs 2 BBI	soaked soil is contain I. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volum ft. ct H2O 0.0 Bl ft. e 67 ct - 70 ga <u>E</u>	ned by b ne of soi ne of soi J. ft. BL J. ft. BL	arriers, natural (or n l. rolume of soil. il. Cu. OIL 0.0 BBI	ot). ft. yds.
Total Solid/Liquid Volume: 2,000 sq. f Estimated Volumes Spilled Liquid in Soil: Free Liquid: Free Liquid: Totals: Totals: Total Liquid Spill Liquid: Totals: BBL Estimated oil recovered: BBL Estimated oil recovered: BBL Separator gas calculated: - MCF Separator gas released: - MCF Gas released from oil: - Ib	• Sa • Gr • Sa • Cl • Cl • Cl • Cl • Cl • Cl • Cl • Cl	and = 0.08 g and call (calicit andy claid value andy loam = 0. ft. ft. iL iL iL iL iL iL iL iL iL iL iL iL iL	Allon (gal.) liquid pe he) loam = 0.14 gal m soil = 0.14 gal 16 gal. liquid per ga 20 cu. ft. 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. Total Free Liquid Volume: <u>Estimated Production</u> Estimated Produ <u>Estimated Surfac</u> Surface Area: Surface Area: Surface Area: Surface Area: Surface Area: <u>Estimated Weights</u> , Saturated Soil = Total Liquid = <u>Air Emission of Reporti</u> HC gas release reportable?	Use the following whe Occurs when the spil * Clay loam = 0.20 gs * Gravelly (caliche) Ic * Sandy loam = 0.5 g sq. n Volumes Lost uction Spilled: ce Damage 2,000 sq. .0459 acr and Volumes 7,467 lbs 2 BBI	soaked soil is contain I. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volum ft. cu H2O 0.0 Bi ft. = 67 ct - 70 ga <u>11</u>	ned by b ne of soi ne of soi J. ft. BL J. ft. BL	arriers, natural (or n l. rolume of soil. il. Cu. OIL 0.0 BBI	ot). ft.
Total Solid/Liquid Volume: 2,000 sq. f Estimated Volumes Spilled Liquid in Soil: Free Liquid: Totals: Total Liquid Spill Liquid: Totals: Total Liquid Spill Liquid: Estimated oil recovered Volumes Estimated oil recovered: BBL Estimated oil recovered: BBL Mathematication from flowline leaks: Volume of oil spill: Volume of oil spill: - BBL Separator gas released: - MCF	• Sa • Gr • Sa • Cl • Cl • Cl • Cl • Cl • Cl • Cl • Cl	and = 0.08 g and call (calicit andy claid value andy loam = 0. ft. ft. iL iL iL iL iL iL iL iL iL iL iL iL iL	Allon (gal.) liquid pe he) loam = 0.14 gal m soil = 0.14 gal 16 gal. liquid per ga 20 cu. ft. 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL 0.5 BBL	er gal. volu I. liquid per quid per ga al. volume	me of soil. gal. volume of soil. I. volume of soil. Total Free Liquid Volume: <u>Estimated Production</u> Estimated Produ <u>Estimated Surfac</u> Surface Area: Surface Area: Surface Area: Surface Area: Surface Area: <u>Estimated Weights</u> , Saturated Soil = Total Liquid = <u>Air Emission of Reporti</u> HC gas release reportable?	Use the following whe Occurs when the spil * Clay loam = 0.20 gs * Gravelly (caliche) Ic * Sandy loam = 0.5 g sq. n Volumes Lost uction Spilled: ce Damage 2,000 sq. .0459 acr and Volumes 7,467 lbs 2 BBI	soaked soil is contain I. liquid per gal. volum am = 0.25 gal. liquid p al. liquid per gal. volum ft. cu H2O 0.0 Bi ft. = 67 ct - 70 ga <u>11</u>	ned by b ne of soi ne of soi J. ft. BL J. ft. BL	arriers, natural (or n l. rolume of soil. il. Cu. OIL 0.0 BBI	ot). ft.