STOK0057967

"Rite in the Rain"
ALL-WEATHER
Environmental
FIELD BOOK
No. 550 F

50F Enviro-Fab Cover

5 32281 55021 1

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Location IRW Date 4/4/08

Project / Client Motley Rice

Additional notes for manure sampling:

CP-1-A; CP-1-B Mr. Fite uses hay and protein cubes as feed for his cattle. MAN-BC-20-F, MAN-BC-20-D. MAN-BC-21-F + D.

CP-2-A Jerry Hammond property. MAN-BC-22-F, MAN-BC-22-D

type of feed - hay, some liquid feed. Not sure what type of liquid feed.

time in pasture - 30-40 yrs.

type of fertilizer - Triple 19 (19N / 19P / 19Mg)

last fertilizer application - 3 years ago.

applied poultry waste - Hammond is not sure. Maybe 10-15 years ago.

CP-4A Duane + Lavanne Thomas MAN-BC-24 F + MAN-BC-24 D.

# of cattle in field: 70

type of feed: grain - corn, oats, distillers grain, corn gluten.

mineral - 18% cow fin 10% magnesium, 14% P

sweet mag

trace minerals - 2-3% P + cow fin.

type of fertilizer - urea: 150 lbs/acre in May '07

dry hen litter 2 tons/acre in Nov. '07

RC 4/4/08

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Location IRW Fite Residence Date 11/10/08

Project / Client Motley Rice

Weather: Overcast, Rainy. 50's. Scattered Showers

Personnel: Roger Olsen CDM - Denve

Darren Brown CDM - Wichita

Rashida Coulthurst - Lithochimeia Tulsa

Plan: Collect soil and spring samples from Fite property off Hwy 10 NE of Tahlequah, OK.

→ Sample Locations will be near EOF CP-1-A and CP-1-B see page 39 for further details. Primary purpose is to collect 0-2" interval

1334 ~~1334~~ on site @ Fite property.

1335 on site @ southern most Fite spring 24 min discharge. SPR-FITE-01

WP20 WP N35.9673 W94.93050

Photos: 100-1116 through 100-1119.

Time/date in camera incorrect. Corrected if.

1359 car trouble on Fite property.

Dan [illegible] 11/10/08

RC 11/10/08

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Location IRW Fite Residence Date 11/10/08

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1428 on site @ 2nd Fite Spring. Did not meet minimum discharge requirement. No sample taken Photos 100-1120 - 100-1121.
WP 22 N35.97216 W94.92722 EC 111308

1444 on site @ Fite Well ~~under 50ft~~ deep 150ft
WP 23 N35.97492 W94.92354
Photos 100-1122 - 100-1125
Well cased to 40ft. GW-FITE-01-101008

1510 *on site @ Fite Hay.

1521 on site @ CPIA Collect soil samples.
* CPIA-1, WP 25 N35.97302 W94.92138
Photos 100-1126 - 100-1127

1525 CPIA-2 N35.97301 W94.92143
Photos 100-1128

1530 CPIA-3 N35.97308 W94.92137
Photos 100-1129

1532 CPIA-4 N35.97289 W94.92136
Photos 100-1130

1535 CPIA-5 N35.97284 W94.92127
Photos 100-1131
overview photos 100-1132 - 100-1138

1556 off site of Fite property.

1600 Return to Tulsa for shipping.

EC 11/10/08

Location IRW Fite Residence Date 11/10/08

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*NOTE:
CPIA-1 is Fite B1-1-1
CPIA-2 is Fite B1-2-1
CPIA-3 is Fite B1-3-1
CPIA-4 is Fite B1-4-1
CPIA-5 is Fite B1-5-1.
*FITE-HAY-1 + FITE-HAY-2 next page EC 11/12/08

EC 11/10/08

Location 1RW Fite Residence Date 11/12/08 RC

Project / Client Motley Rice

1612 NOTE: FITE-HAY-01 and FITE-HAY-02 were collected from hay bales North of the house. Notes were inadvertently omitted from field notes due to inclement weather.

11308 1500 hrs. NOTE:

Per Darren Brown's instructions, the following represents supplemental observations by Darren Brown during the visits to the two springs on the Fite property on 11/10/08. A light rain was falling during the visits to the springs.

The spring identified by sample ID SPR-FITE-01 on page 53 of this field book had the following characteristics.

The spring is located approximately half way up the hill slope. The spring appeared to be discharging from the overburden material. No bedrock outcropping was observed. The discharge appeared to be approximately 1 to 2 liters per minute. A steel pipe, approximately 2" in diameter was installed back into the hillside with a concrete berm supporting the discharge end of the pipe.

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Location 1RW Fite Residence Date 11/13/08

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The pipe discharge was very small and may have been plugged. Darren Brown and Roger Olsen excavated a small basin behind the concrete berm structure so that discharging water could be collected by immersing the sample bottles and allowing them to fill. The water was turbid as a result of the excavation effort. The water from the spring was reported by the property owner (Mr. Fite) to discharge year round with a significantly increased discharge during the spring. Mr. Fite reported that his grandfather installed the steel discharge pipe. The spring runs approximately 120 feet down slope and collected in a pool approximately 15 to 20 feet in diameter. The water in the pool was clear, but filled with leaves.

The second spring was visited on the Fite property (note at time 1428 on Page 54 of this field book) and had the following characteristics. The second visited spring was located in an erosional gulley

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Location RW Fite Residence Date 11/13/08

Project / Client Motley Rice

approximately half way up the hill slope. The material appeared to be all overburden and no bedrock outcropping was observed at the point of discharge. Mr. Fite indicated that this spring has a strong flow in the spring and generally discharges throughout the year. The discharge at the time of our visit was less than 1 liter per minute and deemed by Darren Brown to be too low to sample. Additionally, the topography ~~and~~ at of the discharge was not conducive to allow collection by immersion of the sample bottles. If this spring or SPR-Fite-01 is sampled again, Darren Brown recommends collection of the samples using a peristaltic pump with the intake hose immersed in the flow, rather than immersion of the sample bottles.

11/13/08 RC

Location Date

Project / Client

10 Nov 2008 01:36 pm, Photo 1119, SPR-FITE-01; (N35.96739 W94.93050),
Fite property spring sampling. ; Filename: DSCF1119.JPG

10 Nov 2008 01:32 pm, Photo 1116, SPR-FITE-01; (N35.96739 W94.93050),
Fite property spring sampling. ; Filename: DSCF1116.JPG