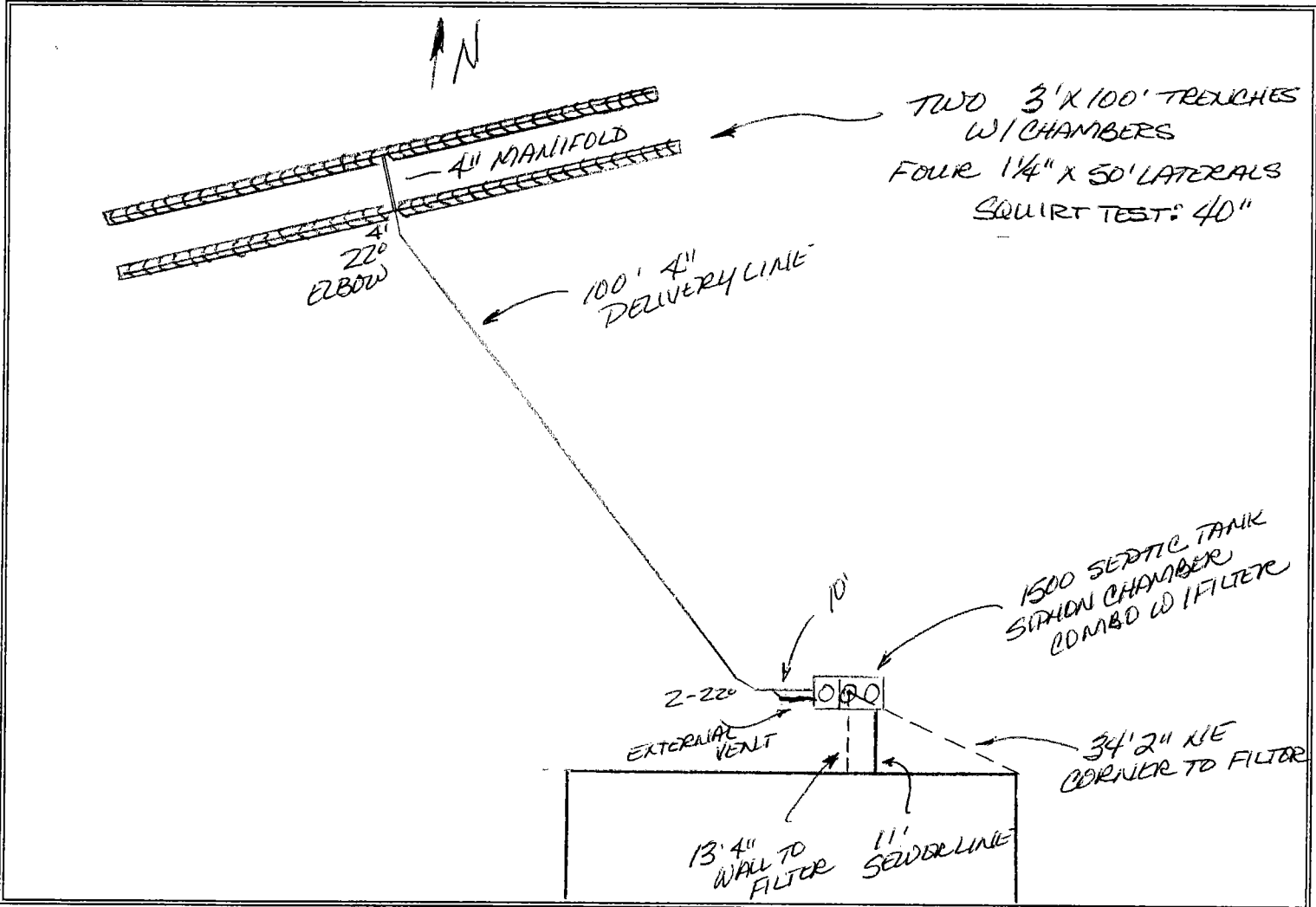


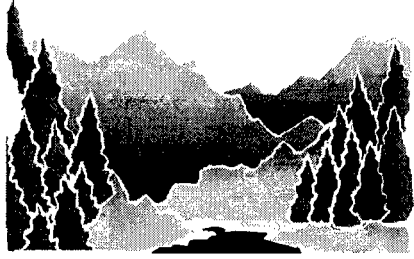
**LAKE COUNTY ENVIRONMENTAL HEALTH DEPARTMENT
FINAL INSPECTION AND USE PERMIT OF WASTEWATER TREATMENT SYSTEM**

PROPERTY OWNER: V. STANFILL / AG MELITA
 PHYSICAL ADDRESS: 70768 HWY 93, BIG ARM
 LEGAL DESCRIPTION: SECTION 26, TWP 24 N, RNG 21 W 1/2 1/4 1/4
 GEOCODE: 3467-26-401-08-0000 SUBDIVISION: _____ LOT: _____
 PERMIT NO: 6197 CONTRACTOR: KENNETH BLUSH



APPROVED FOR 2 BEDROOMS 225 GPD
 SEPTIC TANK: GPS-NS 406582.608 GPS-EW 244900.449
 DRAINFIELD: GPS-NS 406590.563 GPS-EW 244874.842
 INSPECTED BY: Amie Colterwood DATE Nov. 15, 2004
 SIGNATURE OF APPLICANT OR AUTHORIZED AGENT: Kenneth Blush

Terry



APPLICATION FOR LAKE COUNTY WASTEWATER TREATMENT INSTALLATION PERMIT

LAKE COUNTY ENVIRONMENTAL HEALTH
106 FOURTH AVENUE EAST
POLSON, MT 59860-2175

PH: 406-883-7236
FAX: 406-883-7205
Email: envhealth@lakecounty-mt.org

Return the completed application with the \$150.00 permit fee to the above address.

Vertical text on left margin: Contact: Mark Rickert 849-5380 261-7260

Property Owner: Icon Stanfill / Ag Melita LP Phone # 755-8341
Mailing Address: 10 Sky Lane City Kalispell State/Zip MT 59901
Property Address: 70768 Hwy 93 Big Horn
Legal Description: Section: 26 Township 24N Range 21W
Subdivision Name: NE, SE Less Hwy Lot _____ Block _____ Parcel Size 35.09
Bedroom # — see plan —

Wastewater System: (Circle) New Replacement
Water System: (Circle) Well Lake Spring Community
(Circle) Existing Proposed Property Zoned: Yes No
Dwelling: (Circle) Single Family Multi-Family Mobile Home Commercial Garage
Equipment and barn

I hereby declare that the information submitted herein is true and completed to the best of my knowledge. I understand that a final inspection and approval of the system must be conducted by Lake County Environmental Health prior to back filling and use of the system. My signature also authorizes access to the described property for purposes of reviewing this application.

Owner Signature: Icon Stanfill Date: July 7, 2004

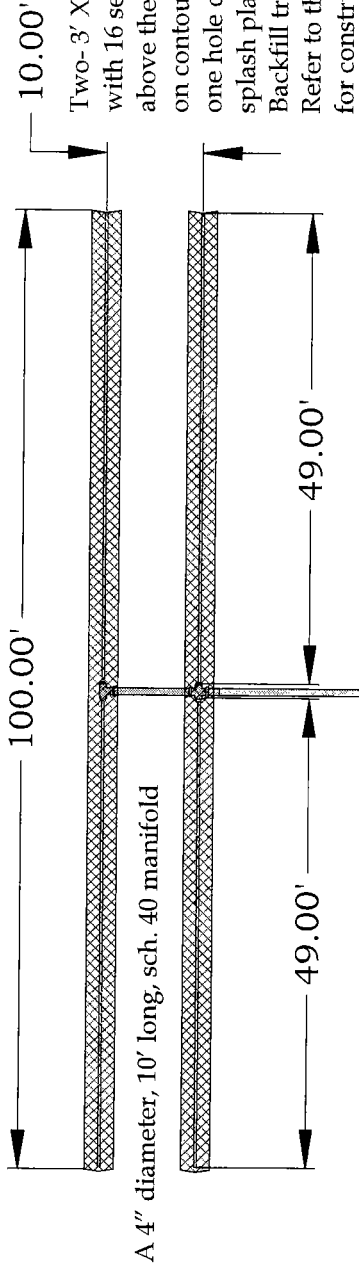
OFFICE USE ONLY

Planning Review: 8-30-04 Per Terry no zone do
Geo Code: 3467-26-4-01-08-0000 Tax Statement # 1823
Property Type: (Circle) Residential Commercial Agricultural Lakeshore
State Septic Approval: (Circle) Required Completed Not Required
Name: _____ Reference Date: _____ States Es # _____
Soil Type: Silt loam 15% coarse up to 24" Absorption Area Required: .3 gpd / ft² (.75)
Contractor: Kenny Blush Required Septic Tank: 1500 w/ siphon
Drainfield Sizing Reference: # of Bedrooms 2 Other: 225 gpd max flow
Type of Absorption Area Required: 2-3'x100' chamber installed as per accompanying specifications

Signature of Registered Sanitarian: [Signature] Date of Issue: Nov 3, 2004 Permit Number: 6197 Check Number: 1846

THE DESIGN, LOCATION, & ORIENTATION OF THE DRAINFIELD MAY NOT BE ALTERED WITHOUT PRIOR APPROVAL FROM LAKE COUNTY ENVIRONMENTAL HEALTH. APPROVED PERMIT IS INVALID IF SYSTEM IS NOT INSTALLED WITHIN TWELVE MONTHS OF ISSUANCE.

AUG 27 2004

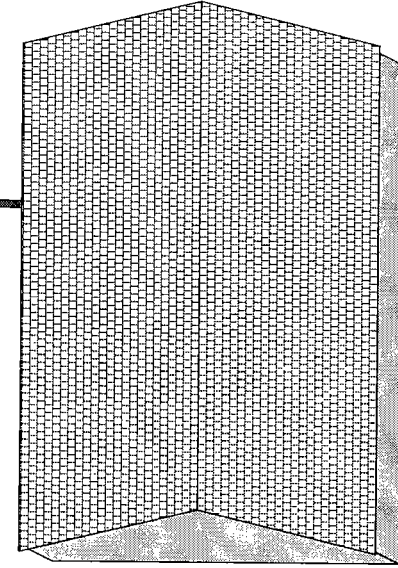


Two-3' X 100' trenches, each trench with 16 sections of 3/4" wide chambers above the laterals. Install the trenches on contour, drill two holes up and one hole down in the laterals. Place splash plates on all of the down holes. Backfill trenches with native material. Refer to the cross-sectional drawing for construction details. See the pump/siphon specification sheet for the lateral sizes, hole sizes, separation distances and the lead distances.

Encase the siphon discharge line in 6" diameter, sch. 40, PVC pipe at any point in which it may be driven upon.

A 4", sch. 40, discharge line from the siphon chamber to the manifold. Install the line as described in the siphon installation manual.

4" diameter, sch. 40, PVC sewer lines sloped at 1/4" per foot from the dwelling into the septic tank. Install at least one clean-out per dwelling and an additional clean-out for every 50' of run.



A 1500-gallon concrete septic tank with a built in siphon chamber. The siphon must meet or exceed the flows established on the siphon specification sheet and must be installed according to the manufacturer's specifications. Install an effluent filter in the septic tank portion of the tank to prevent solids from entering the siphon chamber and going to the drainfield.

Ag Melita
70768 Hwy 93
Big Arm, Montana
NE 1/4, SE 1/4 less Hwy
Sec.26, Twn.24N, Rng.21W
Geo-3467-26-4-01-08-0000
permit 6197 Issue Nov 4, 2004

K-Value for Multiple Wells Using Fetter

Project: Ag Melita county check
 Date: 11/04/04
 Reviewer: Terry Murphy R.S.

$T = 33.6 (Q/S)^{0.67}$ T = transmissivity S = drawdown
 $Q = \text{ft}^3/\text{day} \quad (\text{gpm})(192.5) = \text{ft}^3/\text{day}$
 Convert Q from gpm to ft^3/day

Gwic well #	213690	Gwic well #	78594	Gwic well #	78597
Yield in gpm	50	Yield in gpm	25	Yield in gpm	35
convert to ft^3	9625	convert to ft^3	4812.5	convert to ft^3	6737.5
Static water level	85	Static water level	22	Static water level	8
Pumping water level	415	Pumping water level	126	Pumping water level	190
Drawdown	330	Drawdown	104	Drawdown	182
T=	321.969	T=	438.647	T=	377.734
well depth	420	well depth	287	well depth	202
Casing length	420	Casing length	287	Casing length	202
slot length	60	slot length	50	slot length	20
open bottom	0	open bottom	0	open bottom	0
Aquifer depth	60	Aquifer depth	50	Aquifer depth	20
K=T/b	5.366	K=T/b	8.773	K=T/b	18.887

Gwic well #	78601	Gwic well #	78598	Gwic well #	78599
Yield in gpm	25	Yield in gpm	12	Yield in gpm	2
convert to ft^3	4812.5	convert to ft^3	2310	convert to ft^3	385
Static water level	273	Static water level	70	Static water level	75
Pumping water level	350	Pumping water level	160	Pumping water level	99
Drawdown	77	Drawdown	90	Drawdown	24
T=	536.511	T=	295.54	T=	215.703
well depth	380	well depth	171	well depth	100
Casing length	376	Casing length	34	Casing length	14
slot length	20	slot length	0	slot length	0
open bottom	0	open bottom	0	open bottom	0
Aquifer depth	24	Aquifer depth	137	Aquifer depth	86
K=T/b	22.355	K=T/b	2.157	K=T/b	2.508

AVERAGE K

10.01

Total number of wells used

6

K-Value 10.01 ft/day

Flow direction North 40 West 320 degrees

Montana Ground Water Assessment

Elevation drop 100 ft Conversion to feet 2084 ft
Measured distance 0.25 in Conversion to miles 0.39 miles
Scale 1: 100000 Hydraulic gradient 0.048 ft/ft

Slagle 1988 USGS

Slope calculation drop 0 ft 1/3 topographic drop 0 ft Triangulation
Miles 3 miles run 100 ft
run 15840 ft percent slope 0.00%
Calculate Hydraulic gradient 0 ft/ft calculated gradient 0 ft/ft 0 ft/ft
default 0

i= hydraulic gradient 0.0480 f= discharg gpd 200
d= Mixing zone thickness 15 Qf= effluent discharge 26.7
w= width of drainfield 40 p= precipitation 18
L= length of mixing zone 100 l= prec. In ground water 0.2
Ng= nitrogen in background ground water 2 conversion factor 0.0041
Nr= nitrogen in recharge ie. Rainwater 1 nitrogen in drainfield Level II 24
Ne= nitrogen in drainfield 50

W= .175*L+w W= 57.5 mixing zone width
Am=W*d Am= 862.5 mixing zone area
As=W*L As= 5750 mixing zone surface area
Qg=K*i*Am Qg= 414.41 ground water voumetric rate
Qr=As*p*I Qr= 4.72 precipitation volumetric rate
Qe=f*Qf Qe= 26.7 effluent voumetric rate
Qt=Qg+Qr+Qe Qt= 445.83 total water voulumetric rate
Nt=((Ng*Qg)+(Nr*Qr)+(Ne*Qe))/Qt Nt= 4.86 ppm nitrogen

Nitrogen value at the end of mixing zone standard 4.86 mg/l
Nitrogen value at the end of mixing zone with Level II 3.31 mg/l